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ABSTRACT

The Connecticut Mastery Test testing program assesses essential skills in mathematics and language arts, including listening, reading, and writing, for grades 4, 6, and 8. For grade 8, student achievement is measured and reported in relation to specific learning objectives (criterion-referenced) that students can reasonably be expected to have mastered by the end of grade 7. In 1991, eighth graders mastered an average of 25.8 or the 36 mathematics objectives tested, a slight improvement over the 1990 result. A total of 87.8 percent scored at or above the remedial standard, equaling last year's figure. A total of 38.1 percent scored at or above the mathematics goal, an improvement over 1990's 37 percent. In language arts, the mastery of 8.3 of 11 objectives represented a slight decline from 1990. In writing, eighth graders showed improvement in meeting objectives and scoring above the writing goal, but there was a slight decline in students scoring above the remedial standard, from 93.2 percent in 1990 to 92.5 percent in 1991. Eighth graders averaged 63 units on the Degrees of Reading Power, equaling 1990's figure. Small improvements were registered in the numbers of students scoring above the remedial standard and the reading goal. Fourteen charts present test results and comparative information from 1986 through 1991. Twelve appendixes provide supplemental information on testing and scoring procedures. (SLD)

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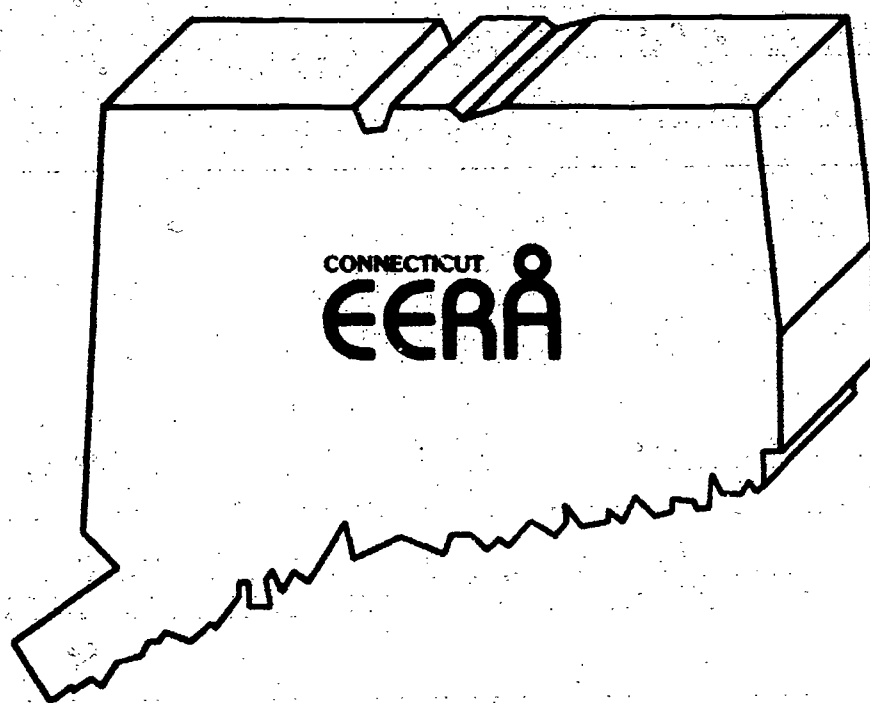
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CONNECTICUT EDUCATION EVALUATION AND REMEDIAL ASSISTANCE

GRADE 8 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS 1991-92



CONNECTICUT STATE DEPARTMENT OF EDUCATION

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Connecticut
Education Evaluation and Remedial Assistance

GRADE 8 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS: 1991-92

CONNECTICUT STATE DEPARTMENT OF EDUCATION

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LEGISLATIVE BACKGROUND

In June 1984, the General Assembly of the State of Connecticut amended Section 10-14 m-r of the Connecticut General Statutes, an act concerning Education Evaluation and Remedial Assistance (EERA). This law provides that:

- o By May 1, 1985, each local or regional board of education shall have developed and submitted for State Board of Education approval, a new plan of educational evaluation and remedial assistance. Each plan had to address the following:
 - o the use of student assessment results for instructional improvement;
 - o the identification of individual students in need of remedial assistance in language arts/reading and mathematics;
 - o the provision of remedial assistance to students with identified needs; and
 - o the evaluation of the effectiveness of the instructional programs in language arts/reading and mathematics.
- o The State Board of Education shall administer an annual statewide mastery test in language arts/reading and mathematics to all fourth-, sixth- and eighth-grade students, with the following exceptions:
 - o Special Education students who are excluded by a Planning and Placement Team (PPT) decision;
 - o students who have been enrolled in an "English as a Second Language" program for two years or less; or
 - o students enrolled in a Bilingual Program (as defined in Section 10-17e of the Connecticut General Statutes) for two years or less.
- o Each student who scores below the statewide remedial standard on one or more parts of the eighth-grade mastery examination shall be retested. These students shall be retested annually, using the eighth-grade mastery test, only in the deficient area(s) until such students score at or above the statewide remedial standard(s).
- o Biennially, each local or regional board of education shall submit to the State Board of Education a report which includes indicators of student achievement and instructional improvement.
- o On a regularly scheduled basis, the State Board of Education shall complete field assessments of the implementation of local EERA plans.

- o On an annual basis, test results and low income data shall be used to determine the distribution of available state funds to support remedial assistance programs.

The purpose of this report is to provide an overview and summary of the implementation of the eighth-grade Connecticut Mastery Test. The mastery test assesses how well each student is performing on those skills identified by content experts and practicing educators as important for students entering eighth grade to have mastered.

FOREWORD

The Connecticut Mastery Test is a critical element in Connecticut's agenda to attain educational equity and excellence. The testing program assesses essential skills in mathematics and language arts, including listening, reading and writing, for grades four, six and eight students. Student achievement is measured and reported in relation to specific learning objectives that students reasonably can be expected to have mastered by the end of grades three, five and seven.

The Connecticut Mastery Test provides valuable educational information which can be used to improve instruction and elevate the achievement of Connecticut's students. The test results are reported in a manner that identifies how well each student is succeeding in relation to clearly defined and meaningful standards. It is our hope that educators throughout the state use the results as a tool to gain better understanding of the learning occurring in our classrooms and the ways to increase learning in the future.

Connecticut is committed to an annual cycle of assessment in order to promote:

- o the monitoring of individual student achievement;
- o the evaluation of instructional program effectiveness;
- o educational goal setting; and
- o remedial assistance program improvement.

An examination of the results since 1985 reveals many signs of steady, incremental improvement. The general improvement since the start of the program is quite impressive in some areas. Yet the many Connecticut educators who helped to build the program had the foresight to include some very demanding content and standards. Student performance in relation to these expectations reveals that much remains to be done.

As you examine these results, it is our hope that the many stories they tell will prove useful and informative. Department staff are available to facilitate the interpretations and application of these test scores.



Peter Behuniak
Acting Chief
Bureau of Evaluation and Student Assessment

OVERVIEW OF THE MASTERY TESTING PROGRAM

In the spring of 1984, the Connecticut General Assembly amended the Education Evaluation and Remedial Assistance (EERA) legislation to authorize the creation of mastery tests in the basic skill areas of mathematics and language arts, including listening, reading and writing skills. The tests were to be established for grades four, six and eight.

The goals of the mastery testing program are:

- o earlier identification of students needing remedial education;
- o testing a more comprehensive range of academic skills;
- o setting high expectations and standards for student achievement;
- o more useful test achievement information about students, schools and districts;
- o improved assessment of suitable equal educational opportunities; and
- o continual monitoring of students in grades four, six and eight.

The type of test that best addresses these goals is a criterion-referenced test. Criterion-referenced tests are designed to assess the specific skill levels of students. Such tests usually cover relatively small units of content. Their scores have meaning in terms of what each student knows or can do. Test results are used to identify the areas of strengths and weaknesses of each student.

MASTERY TEST CONTENT

The CMT is designed to assess essential language arts/reading, writing and mathematics skills that can reasonably be expected to be mastered by most students by the end of the third, fifth and seventh grades. The specific skills to be tested within these content areas were identified by committees of educators from throughout the state. In addition, surveys were sent to many teachers, administrators and parents to determine the appropriateness of these skills for the Mastery Test. A complete description of the procedures used in the development of the eighth-grade CMT can be found in Appendix A (p. 33).

Mathematics

The Mathematics Advisory Committee recommended a grade eight mathematics test that assessed thirty-six (36) specific objectives in four domains: (1) Conceptual Understanding; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. There are four test items per objective for a total of 144 items on the mathematics test. A detailed list of domains and objectives is given in Appendix B (p. 37).

Language Arts

The Language Arts Advisory Committee recommended a 111-item grade eight language arts test that covers two domains: Reading/Listening and Writing/Study Skills. Eleven (11) objectives were recommended by the Language Arts Advisory Committee.

The general content area of Reading/Listening consisted of narrative, expository and persuasive passages on a variety of topics measuring a student's ability in: (1) Literal Comprehension; (2) Inferential Comprehension; and (3) Evaluative Comprehension. Audiotapes were used to assess students' listening comprehension ability in: (1) Literal Comprehension and (2) Inferential and Evaluative Comprehension. The Degrees of Reading Power (DRP) test was also used to assess reading. The DRP test included eleven (11) passages and seventy-seven (77) test items. It was designed to measure a student's ability to understand nonfiction English prose at different levels of reading difficulty.

The general content area of Writing/Study Skills consisted of three components. First, there was a writing sample for direct, holistic assessment of student writing. Each student was asked to write a composition on a designated topic. Writing was then judged on a student's demonstrated ability to convey information in a coherent and organized fashion. Second, the mechanics of good writing, which was defined as (1) Capitalization and Punctuation, (2) Spelling, (3) Agreement and (4) Tone, were assessed in a multiple-choice format. Third, Study Skills were assessed through Locating Information and Note-taking/Outlining. Locating Information (Schedules, Maps, Index and Reference Use), measured a student's ability to find and use information from the sources listed. Note-taking and Outlining tested a student's ability to take notes and report information as well as complete missing outline information. A detailed list with objectives and number of items per objective is given in Appendix C (p. 41).

FUTURE DEVELOPMENT

The Connecticut State Department of Education (CSDE), in conjunction with content consultants and various CMT advisory committees, has begun the development of the second generation of the CMT. The current CMT is under review to determine which skills are appropriate for inclusion on the new test. In addition, new content areas and other forms of assessment techniques (e.g., performance assessment and short-answer questions) are being considered. It is anticipated that the second generation CMT will be administered for the first time statewide in the fall of 1993. Items for this set of exams were piloted in the fall of 1991 and will be followed by a second pilot in the fall of 1992.

SETTING MASTERY STANDARDS BY OBJECTIVE

The essence of the Connecticut Mastery Test (CMT) is the establishment of a specific mastery standard against which each student's knowledge and competency on each objective can be compared. The mastery test incorporates appropriate and challenging expectations for Connecticut public school students. The goal of the CMT Program is for each student to achieve mastery of all objectives. The objectives being tested were identified as appropriate and reasonable for students at each of the grades tested. These tests are designed to measure a student's performance on these specific objectives.

The process of establishing the mastery standards by objective used a statistical method that required two decisions to be utilized. The first decision defined a student who mastered a particular skill as one who had a 95% chance of correctly answering each item within the objective. The second decision was that the specific standard for each objective would identify 99% of the students who mastered the skill. By applying the two decision rules stated above to a binomial distribution table, mastery standards were established for the 36 mathematics objectives and the 11 language arts objectives.

The mastery standards are as follows:

- o In mathematics, for each of the 36 objectives, a student must answer correctly at least 3 out of 4 items.
- o In language arts, for the 11 multiple-choice objectives with varying numbers of items, a student must answer correctly the following numbers of items:

	<u># Items Correct For Mastery</u>
WRITING MECHANICS	
(1) Capitalization & Punctuation	9 out of 12
(2) Spelling	6 out of 8
(3) Agreement	11 out of 15
(4) Tone	3 out of 4
STUDY SKILLS	
(5) Locating Information	9 out of 12
(6) Note-taking and Outlining	3 out of 4
LISTENING COMPREHENSION	
(7) Literal	3 out of 4
(8) Inferential and Evaluative	12 out of 16
READING COMPREHENSION	
(9) Literal	6 out of 8
(10) Inferential	10 out of 14
(11) Evaluative	10 out of 14

No mastery standards were set for the two holistic language arts measures, neither the Degrees of Reading Power (DRP) test nor the Writing Sample, since these measures are not composed of objectives on which mastery could be assessed.

SETTING REMEDIAL (GRANT) STANDARDS

In addition to mastery standards, Section 10-14 m-r of the Connecticut General Statutes requires that the Connecticut State Board of Education establish statewide standards for remedial assistance in order to meet two responsibilities:

- o to identify and monitor the progress of students in need of remedial assistance in language arts/reading and mathematics as part of the EERA field assessments; and
- o to distribute EERA funds based on the number of needy students statewide, as well as for use in the Chapter 2 and Priority School District Grants.

Students who score below the remedial standard(s) are eligible for services provided for in EERA legislation. Remedial standards were established by the State Board of Education acting on the recommendations of committees that represented Connecticut citizens and educators. The standard-setting committees recommended the following remedial standards:

1. In mathematics, a student who answers fewer than 78 of the 144 items (54%) correctly is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.
2. In reading, a student whose Degrees of Reading Power (DRP) unit score is lower than 55 is required to receive further diagnosis and, if necessary, to be provided with remedial assistance.
3. In writing, a student receiving a total holistic score less than 4 is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

The mastery and remedial standards were established by the State Board of Education on June 4, 1986. For a detailed explanation of the remedial standard-setting process, see Appendix D (p. 43).

STATEWIDE ACHIEVEMENT GOALS

In addition to mastery and remedial standards, statewide achievement goals have been established in the content areas of mathematics, reading (DRP) and writing. These goals represent high expectations and high levels of achievement for Connecticut public school students.

The achievement goals are as follows:

- o In mathematics, all students must master 31 of 36 objectives tested.
- o In reading, a student must score a Degree of Reading Power (DRP) unit score of 62 with 80% comprehension.
- o In writing, a student must score a total holistic score of 7 on a scale of 2 to 8.

STUDENT GROWTH OVER TIME

The Connecticut Mastery Test (CMT) Program is designed to provide criterion-referenced information about the level of student mastery of objectives in grades four, six and eight. However, the basic scores reported for the mastery tests do not provide a system for evaluating achievement growth from grade four to grade six to grade eight. This is so because mastery decisions are based on student performance (mastery/non-mastery) on objectives that are unique to grade level. Mastery of objectives cannot be compared directly across grade levels and tests because of the differences in the number of objectives, curriculum content and levels of difficulty. In order to make valid interpretations across grade levels, the mastery test performance must first be linked using a procedure called vertical equating.

Purpose of Vertical Equating

Vertical equating is a psychometric technique for comparing tests at all ability levels. This is accomplished by putting them on a new scale which is common to the tests. Vertical equating is based on two assumptions. The first is that learning is continuous. The second is that instruction in each area is related to increased achievement in that area. These assumptions enable test developers to create a scale score that covers a wide range of content over several grades. The development of these "growth scales" is a common practice and has been used successfully in the development of a variety of achievement test batteries. The purpose of vertical equating is to provide one scale score system which can be used to compare performance across multiple grade levels. This score system enables test users to interpret test score information over time without altering the basic nature of the testing program. This achievement growth can be monitored over time on the basis of student performance on the CMT across grades.

Development of Vertical Scales

In order to develop a vertical scale, performance on the grade four, grade six and grade eight mastery tests was statistically linked. This was accomplished during the 1987 administration of the CMT using representative statewide samples of approximately 5,000 sixth-grade students and approximately 7,000 eighth-grade students. Each group of students at grade six and grade eight was administered the appropriate on-grade level test form of the CMT along with one below-grade level section of the CMT. Specifically, each group of eighth-grade students took the grade eight test as usual and a part of the grade six test. Likewise, each sixth-grade group took the grade six test as usual along with a section of the grade four test. Each sample of students took only one below-level section of the CMT involving approximately one hour of additional testing time. Performance on the below-level items was not counted toward the CMT scores of individual students. For each of these linking samples, item difficulty estimates were obtained for the on-grade and below-grade level items by analyzing all items together as one test. Once items from the on-grade and below-grade level tests were linked, item difficulties from each level of the CMT were adjusted to a common metric to produce the vertical scale.

Vertical scales were established in the content areas of mathematics and the reading comprehension section of the language arts test. For each grade and content area, every correct score corresponds to a specific value on a common score scale (vertical scale). Each of the vertical scales was constructed so that each scale score point represents the same theoretical achievement level whether derived from a score on the grade four test, a score on the grade six test, or a score on the grade eight test. This allows valid interpretations of growth across time using tests differing in content, length and item difficulty. All items on the mathematics and reading comprehension tests were used in the development of the vertical scales. The writing and language arts tests were not scaled because of the nature of these assessment processes. The Degrees of Reading Power (DRP) test employs DRP unit scores which are already on a common scale across grades, obviating the need for any other development. (For more information see Congero, W.J., 1989, The Development of Vertical Scales to Enhance the Evaluation of Assessment Data. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. This paper is available through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.)

Scaled scores can be used to measure growth over time because CMT scores from all three grade levels have been placed on a common scale. These scales provide a means of monitoring students' academic progress from grade to grade. Before the scales were developed, it was difficult to assess the performance of groups of test takers as they moved from grade to grade because of differences in test length, curriculum content covered and levels of difficulty on the fourth-, sixth- and eighth-grade tests.

Since students who took the fourth-grade test in 1988 subsequently took the sixth-grade test in 1990, change in test performance can be assessed across two years' time. Similarly, change in performance can be assessed for 1991 sixth graders who took the grade four test in 1989. A summary of the overall growth in performance for these two groups of students in the content areas of mathematics and reading comprehension can be found in the 1991-92 Grade 6 Summary and Interpretations Manual. Students who took the fourth-grade tests in 1986 subsequently took the sixth-grade test in 1988 and the eighth-grade test in 1990. Similarly, students who took the fourth-grade test in 1987 subsequently took the sixth-grade test in 1989 and the eighth-grade test in 1991. A summary of the overall growth in performance for these groups of students in the content areas of mathematics and reading comprehension can be found on pages 30 and 31 of this manual.

NORMATIVE INFORMATION

The CMT Program is designed to provide detailed information about fourth-, sixth- and eighth-grade students' mastery of specific skills and objectives. The provision of national norms with CMT results is intended to enhance the usefulness and flexibility of mastery test information by offering a bridge to conventional norm-referenced testing programs. The decision to provide normative information with the CMT does not change the essential purposes of our criterion-referenced testing program. The CMT will continue to be used for diagnostic and other instructional purposes with results reported at the student, classroom, school, district and state levels.

In particular, national norms provide greater:

- o **Test Economy.** By providing national norms with CMT results, school districts can eliminate their standardized testing programs at these grades, thus saving money and undue testing time while retaining normative data.
- o **Test Efficiency.** Federal compensatory programs require the systematic testing of students using instruments that can provide normative information. Because norms are provided with the CMT, school districts will not have to "double test" compensatory program students. This service allows for increased instructional time for these students.
- o **Test Interpretability.** Criterion-referenced test (CRT) programs may be criticized because the public has difficulty interpreting CRT performance. National norms will assist in the interpretation of CMT performance by providing a traditional benchmark with which the public is familiar.

Development of Norms

In order to provide estimated national norm-referenced data based on CMT performance, items on the CMT were statistically linked to items on a nationally norm-referenced test (NRT). Content-appropriate items from a nationally normed host test were included on the CMT to provide a common referent to both tests. Test equating procedures were then used to link CMT items with the normed test by placing all the items on a common scale. With this linkage in place, estimates of how the performance of Connecticut students compares to a national sample could be made. The NRT used to accomplish this task was the sixth edition of the Metropolitan Achievement Test (MAT-6), normed in 1986. The equating of the CMT to the MAT-6 enabled group summary scores on the CMT to be interpreted relative to the MAT-6 nationally representative normative data.

The CMT was initially equated to the MAT-6 during the pilot testing phase to investigate the relationship of the test content and material between the two tests and the differential nature of the items included on the CMT and MAT-6. In addition, these preliminary data provided a benchmark by which the stability of the link could be monitored over time. The stability issue is monitored each year by readministering MAT-6 items during CMT administrations using representative statewide samples. The comparison of these data with prior information provides the information necessary to identify the instructional effects on student performance over time and to update the CMT/MAT-6 link as appropriate. This monitoring and updating ensures the continued accuracy of the normative estimates.

RESEARCH OPTIONS PROGRAM

The Research Options Program is a free service provided by the Connecticut State Department of Education (CSDE) to help educators and educational policymakers gain access to the extensive information available from the Connecticut Mastery Test (CMT). Participation in the Research Options Program is completely voluntary.

The Research Options Program allows educators and educational policymakers (i.e., superintendents, principals, researchers, evaluators and school board members) to benefit from customized research investigations designed to suit their individual needs or questions. Many school districts have taken advantage of the Research Options Program in previous years to successfully address special local concerns.

The Research Options Program provides a number of ways of examining student achievement, as measured by the CMT. For example, one method is to compare aggregated student test scores obtained from the CMT in two or more categories of interest. Categories might include males and females, special program students compared to non-special program students, or any other comparison. These reports include tables that show the proportion of students mastering each objective, average number of objectives mastered and the achievement indicators for students on each component of the test under consideration. These breakdowns allow district personnel to directly compare the performance of specific groups of students. In addition, graphics are provided, as appropriate, with each report in order to simplify the task of interpreting data.

The Research Options component of the CMT has grown a great deal since the first study was performed on the Connecticut Basic Skills Proficiency Test almost a decade ago. This year, test directors and evaluators in 26 districts took advantage of this valuable resource to address questions of local interest. In addition, statewide programs such as Bilingual Evaluation, Chapter I and School Effectiveness have used the research options to obtain useful information for participants in over 100 districts. [For more information see Mooney, R.F., 1989, The Connecticut Mastery Test Research Options Program: The Application of State Criterion-Referenced Test Reports for Local Research Needs. Paper presented at the annual conference of the National Council of Measurement in Education, San Francisco, CA. See also the Research Options Handbook (1988) provided by the Connecticut State Department of Education. (These references are available through the Student Assessment and Testing Unit of the Bureau of Evaluation and Assessment.)]

TEST ADMINISTRATION AND SCORING

The regular administration of the Connecticut Mastery Test (CMT) for 1991 was conducted using Form D during a three-week period commencing on September 23, 1991. Test sessions were conducted by local school district staff under the supervision of local test coordinators who had been trained by staff of the Connecticut State Department of Education (CSDE) and The Psychological Corporation (TPC). A student who took all subtests participated in approximately eight hours of testing.

The Grade 8 Connecticut Mastery Test had eight testing sessions.

- Mathematics I (60 minutes)
- Mathematics II (60 minutes)
- Mathematics III (60 minutes)
- Writing Sample (45 minutes)
- Degrees of Reading Power (70 minutes)
- Reading Comprehension (60 minutes)
- Listening Comprehension (45 minutes)
- Writing Mechanics/Study Skills (60 minutes)

At the conclusion of the make-up testing period, answer booklets were returned to TPC in San Antonio, Texas for optical scanning and scoring, and then organized in preparation for holistic scoring workshops.

Scoring of the Language Arts and Mathematics Tests

The mathematics and language arts multiple-choice tests were machine-scored by TPC. Mathematics scores were reported for the total test as well as for mastery by each objective. Language arts scores were reported for mastery of each objective only.

Scoring of the Writing Sample

Every writing sample was scored by Connecticut educators using a technique known as the holistic scoring method. Holistic scoring is an impressionistic and quick scoring process that rates written products on the basis of their overall quality. It relies upon the scorers' trained understanding of the general features that determine distinct levels of achievement on a scale appropriate to the group of writing pieces being evaluated. All participants received on-site training and were required to demonstrate a clear understanding of the scoring criteria prior to actually scoring student essays. Each paper receives a final score between 2 and 8, where 2 represents a poor paper and 8 represents a superior paper. A thorough description of the training and scoring process, including sample papers representing different holistic scores, is presented in Appendix E (p. 49).

In past years, the Connecticut Mastery Test writing sample was scored exclusively by Connecticut teachers. Following this year's scoring sessions, it was discovered that some of the Connecticut papers had not been scored accurately according to the established holistic scoring criteria. This problem was identified by department staff while conducting routine post-scoring checks. Further examination of the scoring process by department staff and contractors established that a portion of the papers in grades 6 and 8 would need to be rescored. Accordingly, all grade 6 and grade 8 papers were submitted to a validation rescoring by our scoring contractor. This effort succeeded in confirming the accuracy of the initial holistic scores for the large majority of papers. Where a discrepancy was detected, the original scores were corrected to be made consistent with the established criteria.

Analytic Scoring

All papers receiving holistic scores at or below the remedial standard of 4 also received analytic scoring in four categories (traits): focus, organization, support/elaboration and conventions. Analytic scoring is a thorough, trait-by-trait analysis of those components of a writing sample that are considered important to any piece of writing in any context. This scoring procedure can provide a comprehensive picture of a student's writing performance if enough traits are analyzed. It can identify those traits that make a piece of writing effective or ineffective. However, the traits need to be explicit and well defined so that the raters understand and agree upon the basis for making judgments about the writing sample. The analytic rating guide and sample marker papers for the analytic scoring are presented in Appendix F (p. 61).

Scoring of the Degrees of Reading Power (DRP) Test

The DRP multiple-choice test was machine-scored by TPC. The scores reported are in DRP units. These scores identify the difficulty or readability level of prose that a student can comprehend. This makes it possible to match the difficulty of written materials with student ability. These scores can be better interpreted by referring to the readability levels of some general reading materials as shown below:

- o Elementary textbooks (grades 7 through 9) - 54-65 DRP Units
- o Personality Section - teen magazines - 55 DRP Units
- o Adult General Interest Magazines - fiction - 60 DRP Units

A much more extensive list of reading materials is contained and rated in the Readability Report, Seventh Edition, published by The College Board.

The conversion between DRP unit scores and raw scores can be made from the tabled values obtainable through the Student Assessment and Testing Unit of the Bureau of Evaluation and Student Assessment.

SCHOOL DISTRICT TEST RESULTS REPORTING

The CMT school district reports are designed to provide useful and comprehensive test achievement information about districts, schools and students. Four standard test reports are generated to assist superintendents, principals, teachers, parents and students to understand and use criterion-referenced test results. Appendix G (p. 67) presents samples of the district, school, class and parent/student diagnostic score reports.

FALL 1991 STATEWIDE TEST RESULTS

The Grade 8 Connecticut Mastery Test provides a comprehensive evaluation of student performance on specific skills that Connecticut educators feel are important at the beginning of eighth grade. The mastery test's greatest instructional utility lies in its identification of areas of student weakness and strength. This report profiles the statewide results. Each school district also receives a full complement of reports that identify patterns of academic strength and weakness at the district, school, classroom and individual student levels.

Chart 1 (p. 12) gives a statewide summary of the average number of objectives mastered (mathematics and language arts), average writing and reading scores, the number of students scored, the number of students scoring at or above the remedial standard and goal (where applicable) and the percent of students scoring at or above the remedial standard and goal (where applicable).

The following are highlights of the 1991 Grade 8 CMT results:

MATHEMATICS

- o Eighth graders mastered an average of 25.8 of the 36 objectives tested, up slightly from last year's figure of 25.7.
- o A total of 87.8% of the students scored at or above the remedial standard, equaling last year's figure of 87.8%.
- o A total of 38.1% of the students scored at or above the mathematics goal, an increase from last year's figure of 37%.

LANGUAGE ARTS

- o Eighth graders mastered an average of 8.3 of the 11 objectives tested, down slightly from last year's figure of 8.4.

WRITING

- o Eighth graders averaged 5.6 on a scale of 2 to 8, up slightly from last year's 5.5.
- o A total of 92.5% of the students scored at or above the remedial standard, down slightly from last year's figure of 93.2%.
- o A total of 28.4% of the students scored at or above the writing goal, an increase from last year's figure of 27%.

READING

- o Eighth graders averaged 63 units on the Degrees of Reading Power (DRP) test, equaling last year's figure.
- o A total of 80.5% of the students scored at or above the remedial standard, up slightly from last year's figure of 79.7%.
- o A total of 63.9% of the students scored at or above the reading goal, up from last year's figure of 62%.

CHART 1 **1991 CONNECTICUT MASTERY TEST RESULTS** **GRADE 8 STATEWIDE SUMMARY**

SUBJECT	AVERAGE NUMBER OF OBJECTIVES MASTERED	NUMBER OF STUDENTS SCORED	STUDENTS AT OR ABOVE REMEDIAL STANDARD*		STUDENTS AT OR ABOVE STATE GOAL**	
			NUMBER	PERCENT	NUMBER	PERCENT
MATHEMATICS	25.8	30,586	26,864	87.8%	11,654	38.1%
LANGUAGE ARTS	8.3	30,493	_____	_____	_____	_____
	<u>AVERAGE HOLISTIC SCORE</u>					
WRITING SAMPLE	5.6	30,664	28,372	92.5%	8,717	28.4%
	<u>AVERAGE DRP UNIT SCORE</u>					
READING	63	31,060	25,015	80.5%	19,857	63.9%

* MATHEMATICS REMEDIAL STANDARD = 78 ITEMS CORRECT
 WRITING REMEDIAL STANDARD = 4
 READING REMEDIAL STANDARD = 55 DRP UNITS

** MATHEMATICS GOAL = 31 OBJECTIVES MASTERED
 WRITING GOAL = 7
 READING GOAL = 62 DRP UNITS

Mathematics

In mathematics, eighth graders mastered an average of 25.8 objectives, or 71.7%, of the 36 objectives tested. While the state's goal is that all students master every objective, an interim goal of 31 of the 36 objectives has been established which represents a high level of mathematics achievement. Chart 2 (p. 15) illustrates that, statewide, students demonstrated strength (85% or more students achieving mastery) in the conceptual understanding objectives of rounding whole numbers; identifying points on number lines, scales and grids; computational skills objectives involving addition, subtraction, multiplication and division of whole numbers and decimals; and the applications objectives of using a calculator to add, subtract, multiply and divide; and interpreting graphs, tables, and charts. However, students did not perform as effectively (fewer than 50% of the students achieving mastery) on the computational skills objective of multiplying fractions and mixed numbers; and objectives that require higher-level thinking-- that is, solving problems involving measurement, measuring and determining perimeters and areas and making measurement conversions within systems.

These results indicate a consistent pattern throughout the mathematics subtests of student strengths in primarily computational skills and one-step routine applications. These strengths are offset by a pattern of student weaknesses on higher-order objectives. For example, students are consistently strong in their ability to compute with whole numbers. However, there is consistent weakness in working with fractions and mixed numbers and solving problems involving measurement and measurement conversions.

Students getting fewer than 78 questions correct on the 144-question mathematics section (12.2% of the students tested) were identified as needing further diagnosis and possible remedial instruction.

Language Arts

In language arts, eighth-grade students averaged 8.3 objectives, or 75.5%, of the 11 objectives tested. The state's goal is that all students master every objective. Chart 3 (p. 16) illustrates that students did reasonably well on writing mechanics, study skills, and literal reading comprehension. However, weaknesses were found in the higher order objectives of inferential and evaluative reading comprehension and in listening comprehension. These results indicate that students need to learn more effective comprehension strategies while simultaneously being exposed to a wide variety of reading selections.

In writing, eighth-grade students averaged 5.6 points on a scale of 2 through 8. The state's goal is that all students be able to produce an organized, well-supported piece of writing, that is, a holistic score of 7 or 8. Chart 4 (p. 17) illustrates that 29% of the students produced an organized, well-supported piece of writing (scores of 7 or 8), and an additional 50% produced a paper which is generally well organized (scores of 5 or 6). A total of 14% of the students scored a 4, which indicates minimally proficient writing, while the remaining 7% scored below the remedial standard (scores of 2 or 3).

In reading (Degrees of Reading Power test), eighth-grade students averaged 63 units on a scale of 15 through 99. The state's goal is that all students be able to read with high comprehension those materials typically used at the eighth grade or above; that is, at least 62 on the DRP unit scale. Chart 5 (p. 18) illustrates that 64% of the students scored at least 62 on the DRP score scale, 17% scored between 55 and 61 and 19% scored below the remedial standard of 55. The average score of 63 suggests that the typical Connecticut eighth grader can read and comprehend materials normally used up to grade eight. To improve reading performance, more emphasis needs to be placed on reading nonfiction materials during the primary and intermediate grades.

CHART 2 MATHEMATICS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE

CONCEPTUAL UNDERSTANDINGS

1. ORDER FRACTIONS
2. ORDER DECIMALS
3. ROUND WHOLE NUMBERS
4. ROUND DECIMALS TO NEAREST 1, .1, .01
5. MULT/DIV WHOLE #'S & DECIMALS BY 10, 100, 1000
6. ID FRACTIONS, DECIMALS, PERCENTS FROM PICTURES
7. CONVERT FRACTIONS TO DECIMALS & VICE VERSA
8. CONVERT FRACT/DECIMALS TO PERCENTS & VICE VERSA
9. IDENTIFY POINTS ON NUMBER LINES, SCALES, GRIDS
10. IDENTIFY RATIOS AND FRACTIONAL PARTS FROM DATA
11. ID APPROP PROCEDURE FOR ESTIMATING FRACT/DEC

COMPUTATIONAL SKILLS

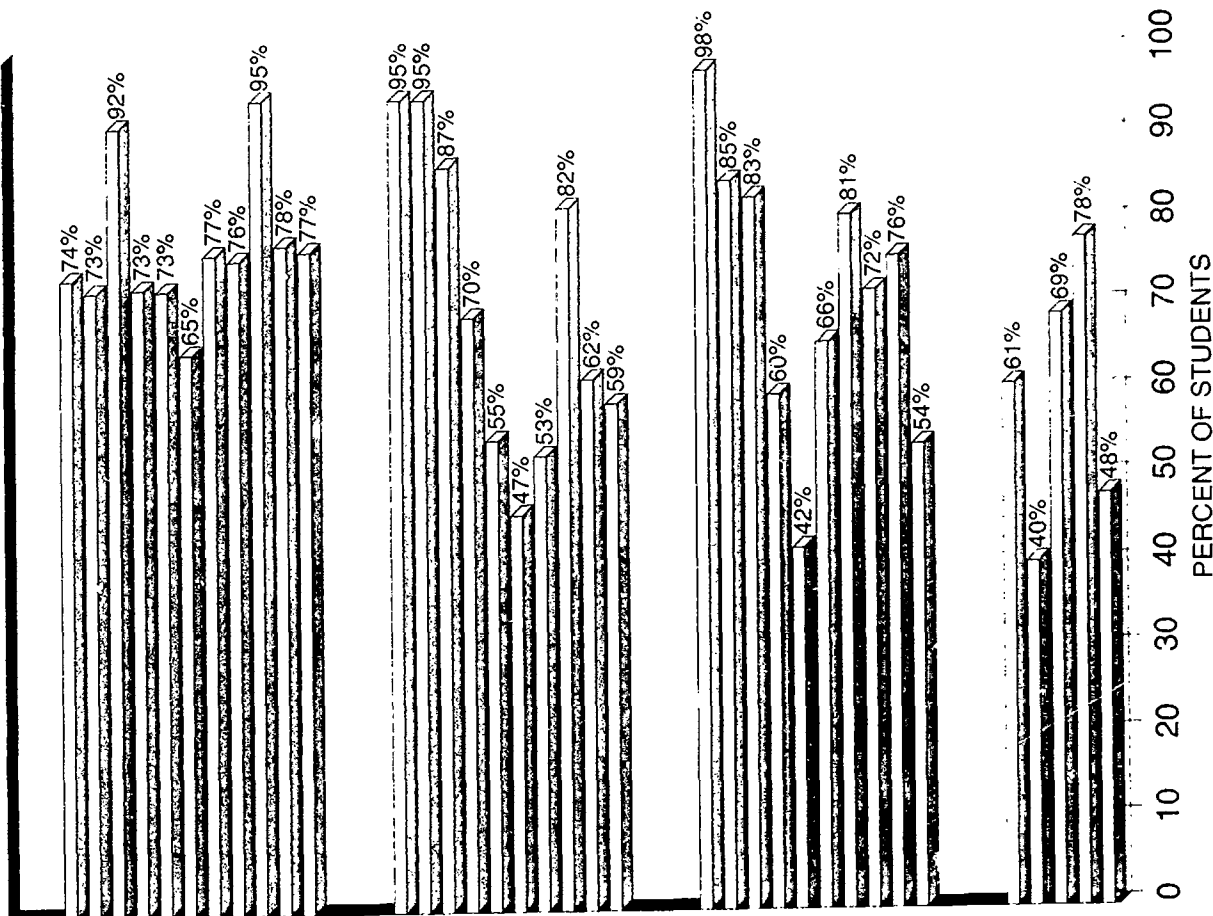
12. ADD AND SUBTRACT WHOLE NUMBERS < 10,000
13. MULT/DIVIDE 2- & 3-DIGIT #'S BY 1- & 2-DIGIT #'S
14. ADD AND SUBTRACT DECIMALS IN HORIZONTAL FORM
15. ID CORRECT DECIMAL POINT IN MULT/DIV OF DECIMALS
16. ADD/SUBTRACT FRACTIONS AND MIXED NUMBERS
17. MULTIPLY FRACTIONS AND MIXED NUMBERS
18. DETERMINE PERCENT OF A NUMBER
19. ESTIMATE SUMS/DIFFS OF WHOLE #'S AND DECIMALS
20. ESTIMATE PROD/QUOT OF WHOLE #'S AND DECIMALS
21. EST FRACTIONAL PARTS/PERCENTS OF WHOLE #'S & \$

PROBLEM SOLVING/APPLICATIONS

22. ADD/SUBT/MULT/DIV WITH A CALCULATOR
23. INTERPRET GRAPHS, TABLES, AND CHARTS
24. SOLVE 1- & 2-STEP PROBS-WHOLE #S/DEC/AVERAGES
25. SOLVE 1- AND 2-STEP PROBLEMS-FRACTIONS
26. SOLVE PROBS INVOLVING MEASUREMENT
27. SOLVE PROBS INVOLVING ELEMENTARY PROBABILITY
28. ESTIMATE REASONABLE ANSWER TO A GIVEN PROBLEM
29. SOLVE PROBLEMS WITH EXTRANEOUS INFORMATION
30. IDENTIFY NEEDED INFO IN PROBLEM SITUATIONS
31. SOLVE PROCESS PROBLEMS-ORGANIZING DATA

MEASUREMENT/GEOMETRY

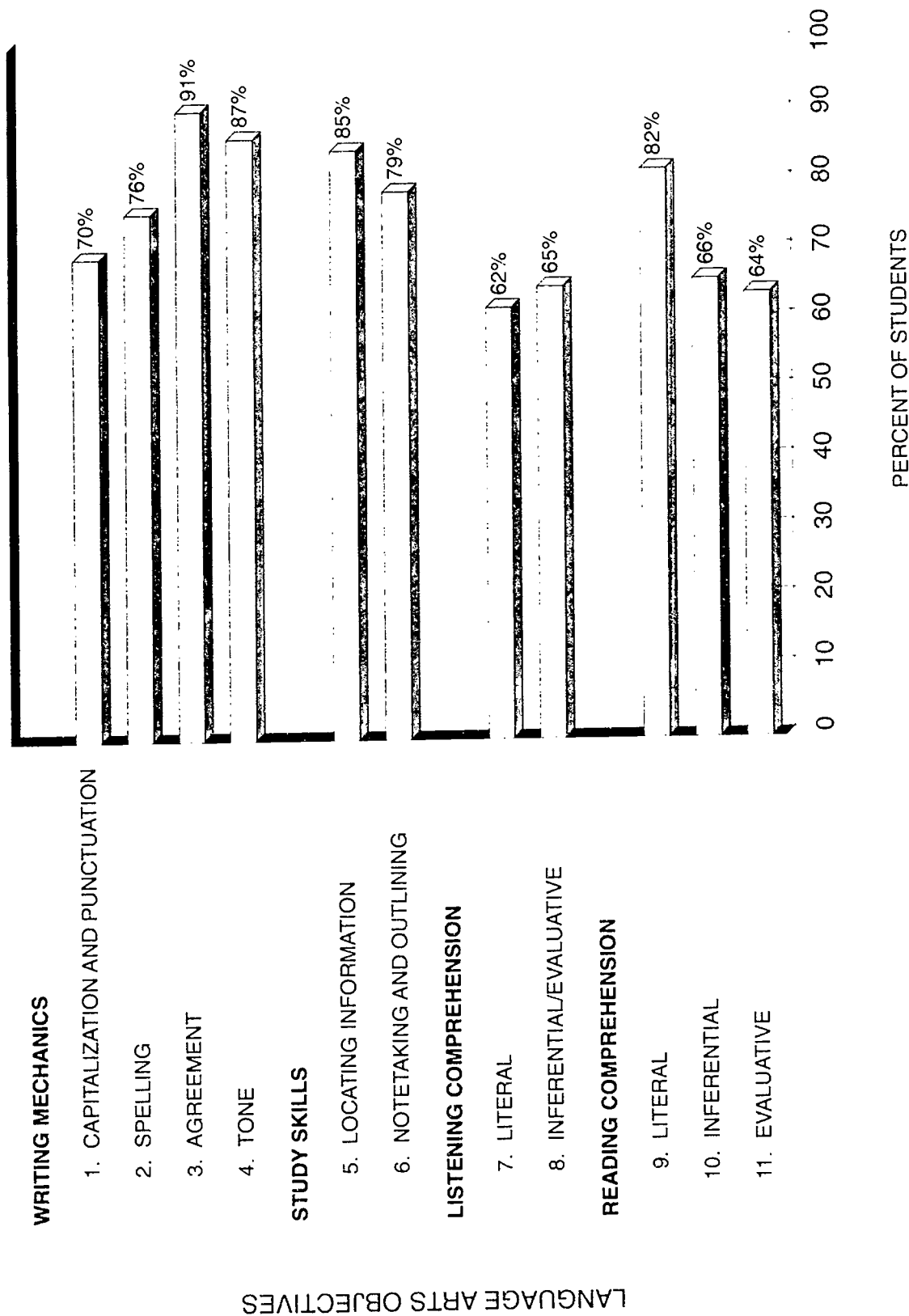
32. IDENTIFY FIGURES USING GEOMETRIC TERMS
33. MEASURE AND DETERMINE PERIMETERS AND AREAS
34. ESTIMATE LENGTH/AREA/VOLUME/ANGLE MEASURE
35. SELECT APPROPRIATE METRIC/CUSTOMARY UNIT
36. MAKE MEASUREMENT CONVERSIONS WITHIN SYSTEMS



25

This bar chart illustrates the percent of students, statewide, who mastered each of the 36 mathematics objectives.

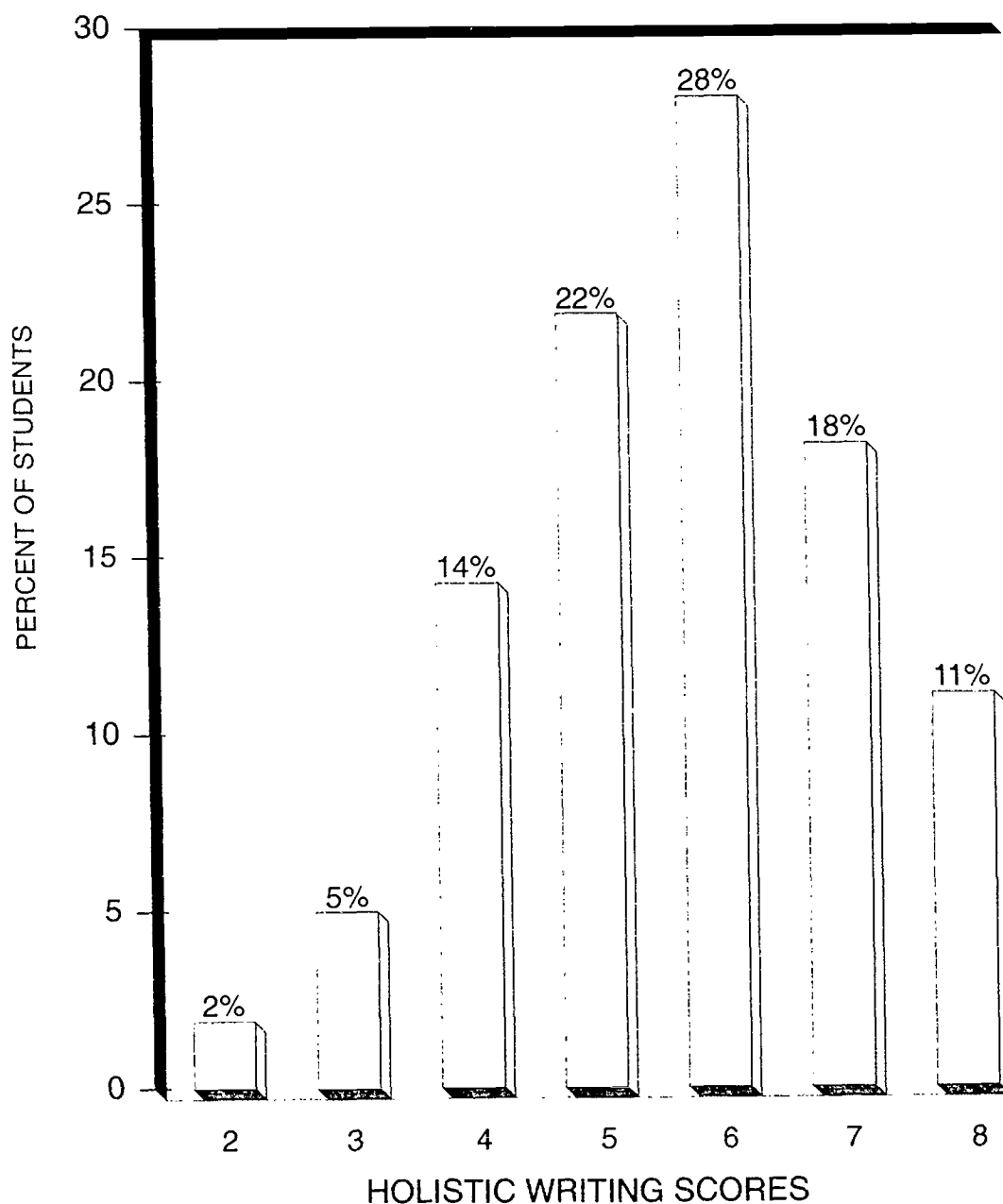
CHART 3
LANGUAGE ARTS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



26

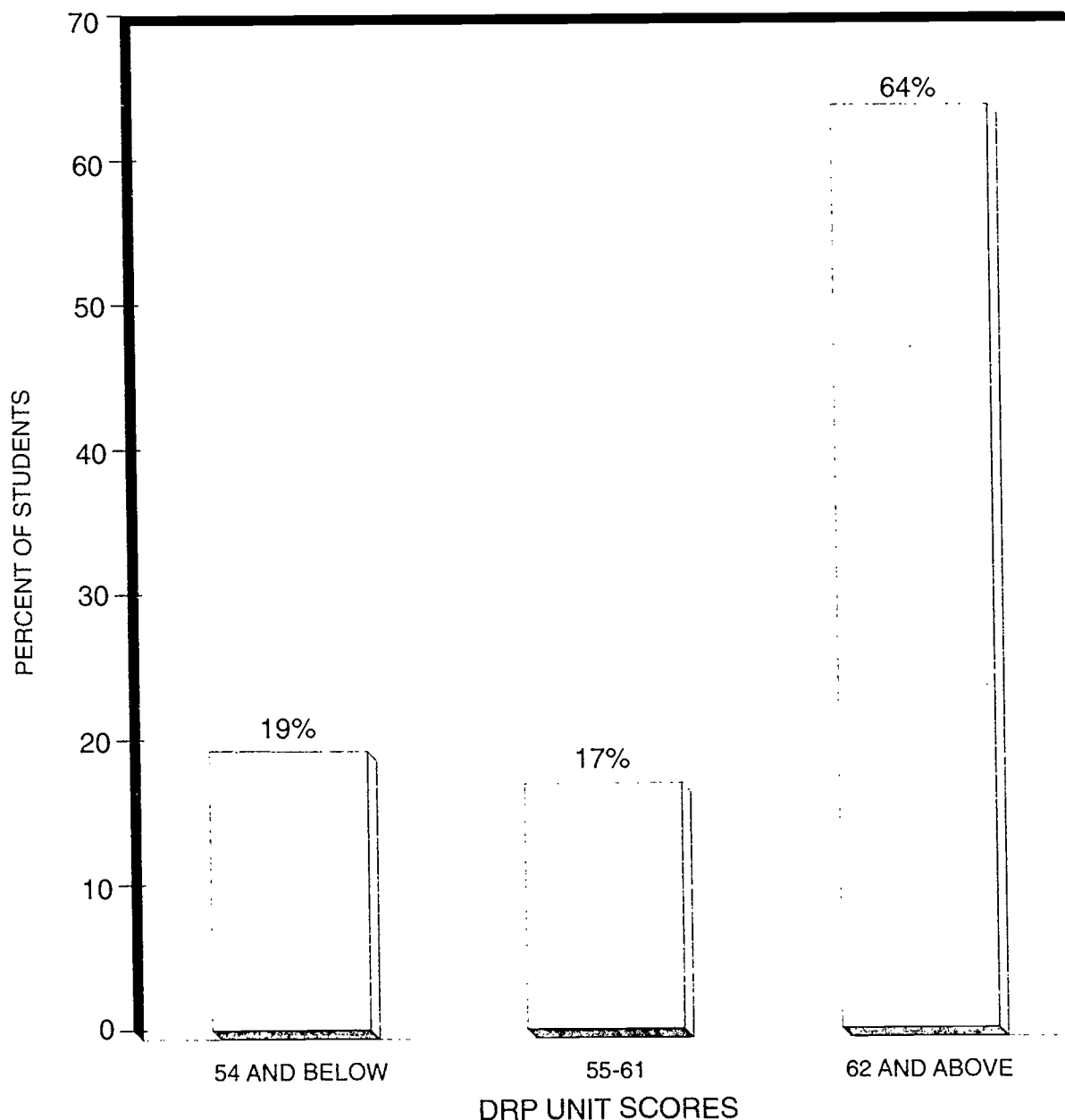
This bar chart illustrates the percent of students, statewide, who mastered each of the eleven language arts objectives.

CHART 4
WRITING SAMPLE:
PERCENT OF STUDENTS AT EACH SCORE POINT



This bar chart illustrates the distribution of students who received each *holistic writing score*, statewide. Holistic writing scores are interpreted as follows: a student who scores 7 or 8 has produced a paper which is well written with developed supportive detail; a student who scores 5 or 6 has produced a paper which is generally well organized with supportive detail; a student who scores 4 is minimally proficient; and a student who scores 2 or 3 is in need of further diagnosis and possible remedial assistance.

CHART 5 **DEGREES OF READING POWER® (DRP)®:** **PERCENT OF STUDENTS AT SELECTED RANGES OF** **DRP UNIT SCORES**



This bar chart illustrates the distribution of students, statewide, scoring in each of three *Degrees of Reading Power* (DRP) score categories. DRP score categories are interpreted as follows: a student who scores 62 DRP units or above has met the statewide Reading Goal and can read, with high comprehension, materials which are typically used at grade 8 or above; a student who scores 55-61 DRP units can read, with high comprehension, materials which are typically used below grade 8 but above the Remedial Standard; and a student who scores 54 DRP units or below is in need of further diagnosis and possible remedial assistance.

COMPARISON OF 1986 THROUGH 1991 TEST RESULTS

Charts 6-12 (pp. 21-27) address the comparison of the 1986 through 1991 test results. Charts 6 (p. 21), 9 (p. 24) and 10 (p. 25) present a comparison of statewide average scores on the four subtests, a comparison of the percent of students scoring at or above the remedial standard and a comparison of the percent of students scoring at or above the statewide goals, respectively. The remaining four charts provide a comparison of the percent of students achieving mastery in each mathematics objective (Chart 7, p. 22) and each language arts objective (Chart 8, p. 23), a comparison of student achievement in relation to the remedial standards (Chart 11, p. 26), and a comparison of student achievement in relation to the statewide goals (Chart 12, p. 27).

Chart 6 (p. 21) shows that the statewide average scores increased in all areas tested when 1991 results are compared to 1986 results. In mathematics, the average number of objectives mastered increased from 23.7 in 1986 to 25.8 in 1991. Mathematics scores have increased slightly each year from 1986 to 1991 indicating a positive trend. The average DRP unit score has increased two DRP unit points, moving from 61 in the initial assessment in 1986 to 63 in 1991. The average number of language arts objectives mastered has increased from 7.5 objectives in the initial 1986 assessment to 8.3 in 1991. In writing, the average holistic score has risen from 5.0 in 1986 to 5.6 in 1991.

Chart 7 (p. 22) lists the percent of students at mastery for each of the 36 mathematics objectives. From 1986 to 1991, 29 objectives have shown a gain in percent of students at or above mastery, 3 have declined and 4 are unchanged. A comparison of the 1991 and 1986 results shows large gains (at least 10 percentage points) in the percent of students meeting the mastery standard in the following objectives: ordering fractions and decimals, identifying points on number lines, scales and grids; identifying appropriate procedures for estimating fractions and decimals; identifying correct decimal point in multiplication/division of decimals; adding and subtracting fractions and mixed numbers; interpreting graphs, tables and charts; solving problems involving measurement; measuring and determining perimeters and areas; and making measurement conversions within systems.

Chart 8 (p. 23) lists the percent of students at mastery for each of the 11 language arts objectives. From 1986 to 1991, 10 objectives have shown a gain in percent of students at or above mastery, and one objective has shown a slight decline. When 1991 results are compared with 1986, areas which showed large gains (at least 10 percentage points) in the percent of students at mastery are: spelling, agreement and tone in writing mechanics; and literal and inferential reading comprehension.

Chart 9 (p. 24) compares the percent of students who scored at or above the remedial standard in mathematics, writing and reading (DRP) for 1986 through 1991. In each content area there has been a gain in the percent of students meeting the remedial standard from 1986 to 1991. The remedial standard for mathematics is 78 out of 144 items correct. There was a 5 percentage point increase in mathematics performance at or above the remedial standard from 1986 (83%) to 1991 (88%). The remedial standard for writing is 4 on a scale from 2 to 8. A 10 percentage point increase in writing performance at or above the remedial standard occurred from 1986 (83%) to 1991 (93%). The remedial standard for reading (DRP) is 55 DRP units. An 8 percentage point increase in performance at or above the remedial standard was reported from 1986 (73%) to 1991 (81%).

Chart 10 (p. 25) compares the percent of students scoring at or above the statewide goals in mathematics, writing and reading from 1986 through 1991. There has been a gain in the percent of students reaching the statewide goal in each of the three content areas over the six CMT administrations. In mathematics, the goal is 31 of 36 objectives mastered. There was an 11 percentage point increase in performance at or above the statewide goal from 1986 (27%) to 1991 (38%). In writing, the goal is 7 on a scale of 2 to 8. The percent of students scoring at or above the statewide standard increased from 20% in 1986 to 28% in 1991. In reading (DRP) the statewide goal is 62 DRP units with 80% comprehension. There was a 7 percentage point increase in performance at or above the goal from 1986 (57%) to 1991 (64%).

Chart 11 (p. 26) is a comparison of student achievement in relation to the remedial standards in 1986 through 1991. Over the six-year period, the percent of students at or above the remedial standard on all three tests (mathematics, reading, writing) has increased from 62.3% in 1986 to 72.5% in 1991, while the percent of students below the remedial standard on all three tests has declined from 6.2% in 1986 to 2.3% in 1991. The percent of students below the remedial standard on one or more subtests has also dropped from 36.3% in 1986 to 25.5% in 1991.

Chart 12 (p. 27) is a comparison of student achievement in relation to the goals for 1986 through 1991. Over the six-year period, there has been an increase in the percent of students reaching the statewide goal on all three tests (mathematics, reading, and writing), while the percent of students below the statewide goal on all three tests has declined from 38.2% in 1986 to 28.0 in 1991. The percent of students above the statewide goal on one or more subtests has increased from 60.0% in 1986 to 69.4% in 1991.

Test Results by District

Appendices H and I address the comparison of test scores by school district. Appendix H (p. 81) and Appendix I (p. 89) present a listing of the mathematics and language arts test results, respectively, for each Connecticut school district. In each appendix, school districts are listed alphabetically, followed by regional school districts. The Type of Community (TOC) designation in the second column and the Education Reference Group (ERG) designation in the third column indicate the TOC and ERG groups with which each district or school has been classified. Definitions of the TOC and ERG classifications are provided in Appendix J (p. 97) and Appendix K (p. 99), respectively. TOC and ERG summaries follow the alphabetical listings of school district results in mathematics and language arts.

The State Department of Education advises against comparing scores between and among school districts. It is more meaningful to compare district results longitudinally within each district. It is also not appropriate or meaningful to sum across the different tests and subtests for comparative purposes because of differences in test length, mastery criteria and remedial standards. These comparisons are inappropriate because it is impossible to identify, solely on the basis of this information, how the average student has performed in the districts being compared. Average scores and standard deviations provide more appropriate comparative information on how well the average student is performing, although many factors may affect the comparability of these statistics as well.

CHART 6 COMPARISON OF STATEWIDE AVERAGE SCORES FOR 1986 THROUGH 1991

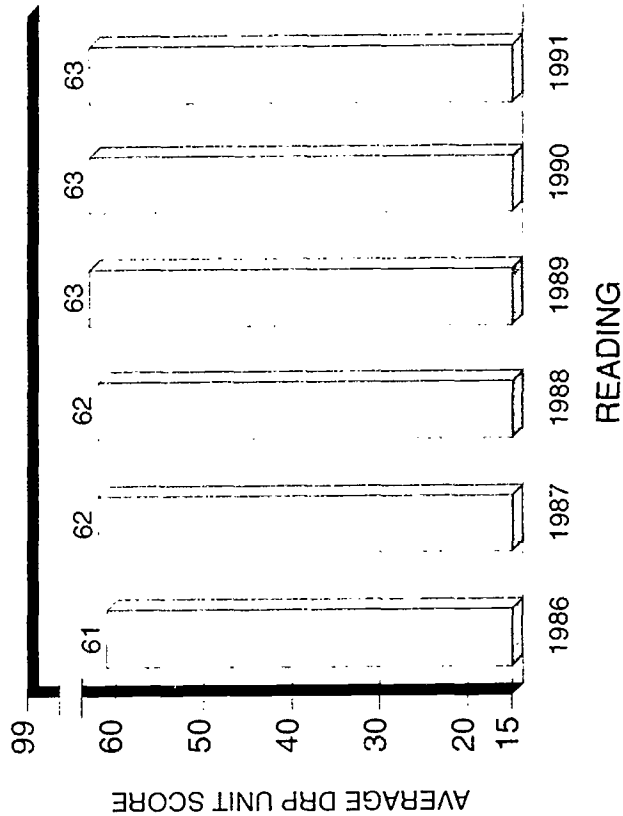
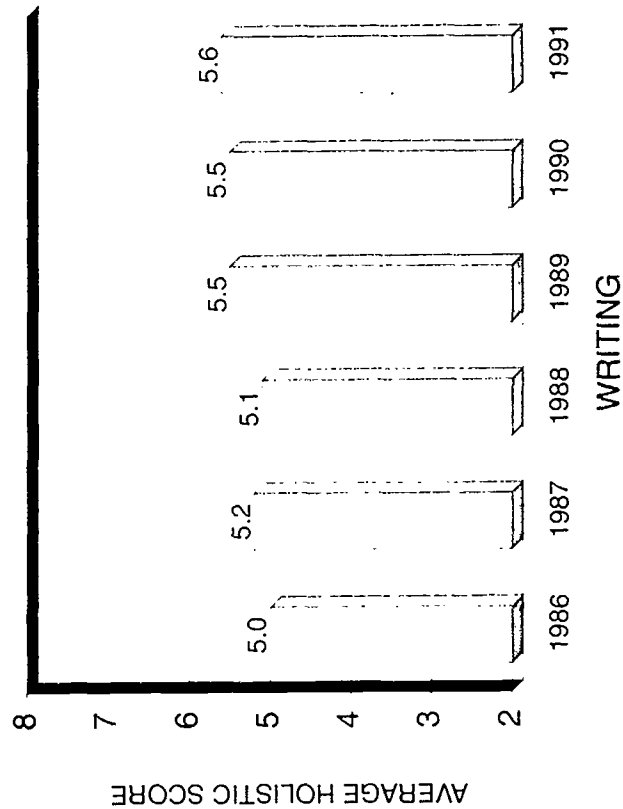
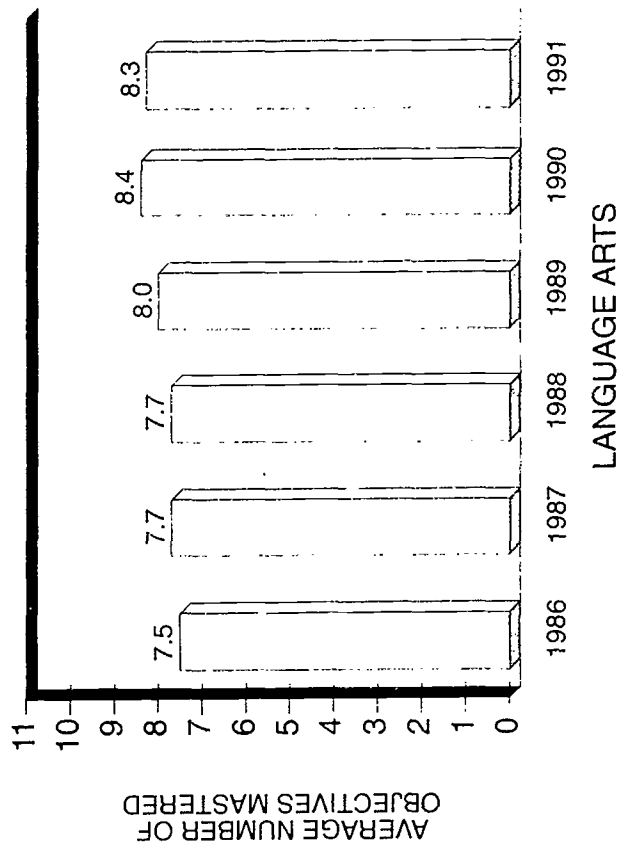
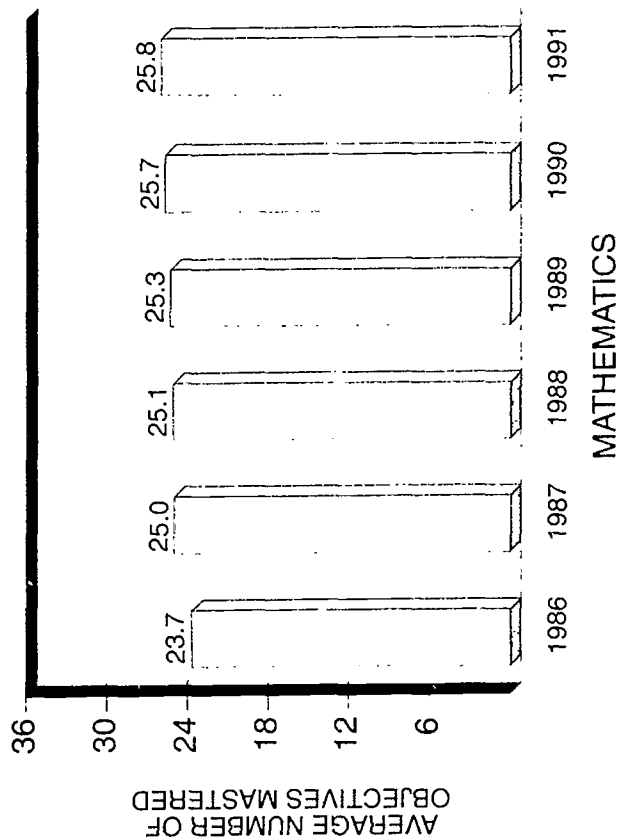


CHART 7

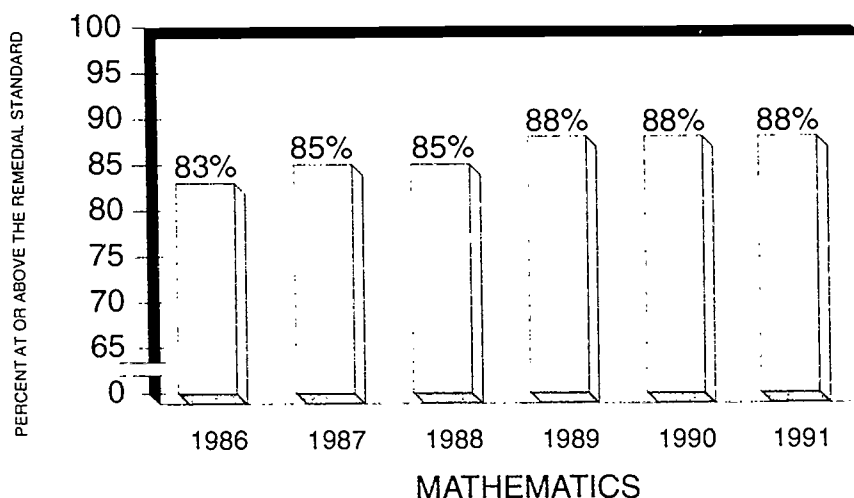
MATHEMATICS: COMPARISON OF THE PERCENT OF STUDENTS ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1986 THROUGH 1991

OBJECTIVE	PERCENTAGE OF STUDENTS AT MASTERY						PERCENTAGE POINT GAIN FROM 1986 TO 1991
	1986	1987	1988	1989	1990	1991	
CONCEPTUAL UNDERSTANDINGS							
1. ORDER FRACTIONS	58%	57%	57%	69%	73%	74%	16%
2. ORDER DECIMALS	58%	63%	65%	61%	73%	73%	15%
3. ROUND WHOLE NUMBERS	87%	85%	86%	89%	92%	92%	5%
4. ROUND DECIMALS TO NEAREST 1, .1, .01	66%	71%	72%	67%	74%	73%	7%
5. MULT/DIV WHOLE #'S & DECIMALS BY 10, 100, 1000	67%	75%	75%	73%	75%	73%	6%
6. ID FRACTIONS, DECIMALS, PERCENTS FROM PICTURES	58%	58%	58%	55%	63%	65%	7%
7. CONVERT FRACTIONS TO DECIMALS & VICE VERSA	74%	70%	71%	74%	77%	77%	3%
8. CONVERT FRACT/DECIMALS TO PERCENTS & VICE VERSA	72%	78%	78%	80%	75%	76%	4%
9. IDENTIFY POINTS ON NUMBER LINES, SCALES, GRIDS	85%	91%	91%	95%	95%	95%	10%
10. IDENTIFY RATIOS AND FRACTIONAL PARTS FROM DATA	85%	85%	85%	95%	78%	78%	-7%
11. ID APPROP PROCEDURE FOR ESTIMATING FRACT/DEC	64%	78%	80%	70%	76%	77%	13%
COMPUTATIONAL SKILLS							
12. ADD AND SUBTRACT WHOLE NUMBERS < 10,000	94%	96%	96%	95%	96%	95%	1%
13. MULT/DIVIDE 2- & 3-DIGIT #'S BY 1- & 2-DIGIT #'S	95%	96%	96%	96%	96%	95%	0%
14. ADD AND SUBTRACT DECIMALS IN HORIZONTAL FORM	89%	85%	85%	88%	87%	87%	-2%
15. ID CORRECT DECIMAL POINT IN MULT/DIV OF DECIMALS	60%	76%	75%	73%	72%	70%	10%
16. ADD/SUBTRACT FRACTIONS AND MIXED NUMBERS	39%	49%	49%	48%	56%	55%	16%
17. MULTIPLY FRACTIONS AND MIXED NUMBERS	44%	51%	49%	47%	49%	47%	3%
18. DETERMINE PERCENT OF A NUMBER	49%	54%	53%	54%	53%	53%	4%
19. ESTIMATE SUMS/DIFFS OF WHOLE #'S AND DECIMALS	78%	77%	78%	87%	81%	82%	4%
20. ESTIMATE PROD/QUOT OF WHOLE #'S AND DECIMALS	69%	70%	70%	72%	62%	62%	-7%
21. EST FRACTIONAL PARTS/PERCENTS OF WHOLE #'S & \$	51%	54%	54%	53%	58%	59%	8%
PROBLEM SOLVING/APPLICATIONS							
22. ADD/SUBT/MULT/DIV WITH A CALCULATOR	98%	99%	98%	98%	98%	98%	0%
23. INTERPRET GRAPHS, TABLES, AND CHARTS	67%	76%	76%	81%	84%	85%	18%
24. SOLVE 1- & 2-STEP PROBS-WHOLE #'S/DEC/AVERAGES	78%	74%	75%	75%	82%	83%	5%
25. SOLVE 1- AND 2-STEP PROBLEMS-FRACTIONS	54%	51%	51%	53%	60%	60%	6%
26. SOLVE PROBLEMS INVOLVING MEASUREMENT	31%	32%	32%	33%	40%	42%	11%
27. SOLVE PROBS INVOLVING ELEMENTARY PROBABILITY	61%	62%	63%	60%	65%	66%	5%
28. ESTIMATE REASONABLE ANSWER TO A GIVEN PROBLEM	76%	81%	80%	83%	80%	81%	5%
29. SOLVE PROBLEMS WITH EXTRANEIOUS INFORMATION	70%	72%	73%	78%	71%	72%	2%
30. IDENTIFY NEEDED INFO IN PROBLEM SITUATIONS	76%	79%	79%	83%	75%	76%	0%
31. SOLVE PROCESS PROBLEMS-ORGANIZING DATA	46%	53%	53%	55%	54%	54%	8%
MEASUREMENT/GEOMETRY							
32. IDENTIFY FIGURES USING GEOMETRIC TERMS	57%	66%	66%	64%	61%	61%	4%
33. MEASURE AND DETERMINE PERIMETERS AND AREAS	30%	40%	41%	37%	39%	40%	10%
34. ESTIMATE LENGTH/AREA/VOLUME/ANGLE MEASURE	63%	69%	71%	71%	69%	69%	6%
35. SELECT APPROPRIATE METRIC/CUSTOMARY UNIT	78%	81%	82%	76%	78%	78%	0%
36. MAKE MEASUREMENT CONVERSIONS WITHIN SYSTEMS	32%	42%	43%	43%	48%	48%	16%

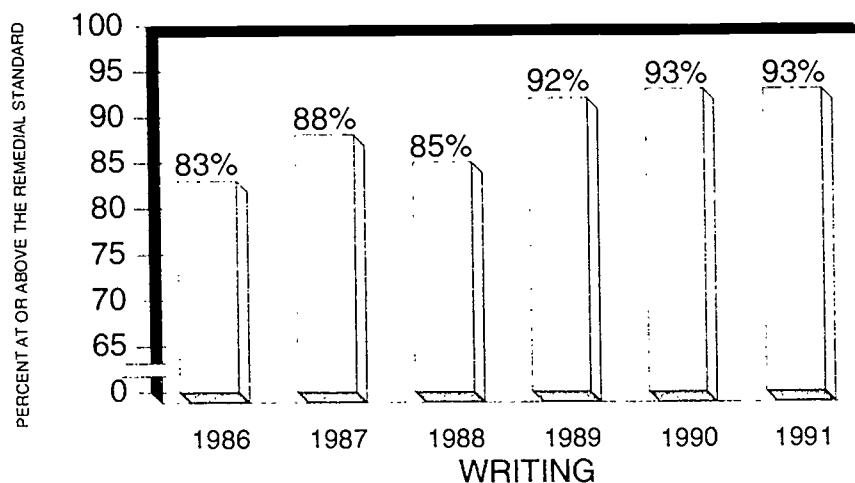
CHART 8
LANGUAGE ARTS: COMPARISON OF THE PERCENT OF STUDENTS
ACHIEVING MASTERY IN EACH OBJECTIVE FOR 1986 THROUGH 1991

OBJECTIVE	PERCENT OF STUDENTS AT MASTERY						PERCENTAGE POINT GAIN FROM 1986 TO 1991
	1986	1987	1988	1989	1990	1991	
WRITING MECHANICS							
1. CAPITALIZATION AND PUNCTUATION	72%	70%	71%	73%	72%	70%	-2%
2. SPELLING	66%	63%	63%	58%	76%	76%	10%
3. AGREEMENT	76%	81%	81%	79%	92%	91%	15%
4. TONE	77%	69%	70%	70%	88%	87%	10%
STUDY SKILLS							
5. LOCATING INFORMATION	83%	88%	87%	89%	85%	85%	2%
6. NOTETAKING AND OUTLINING	73%	71%	71%	78%	79%	79%	6%
LISTENING COMPREHENSION							
7. LITERAL	59%	68%	67%	78%	63%	62%	3%
8. INFERENTIAL/EVALUATIVE	62%	66%	66%	67%	66%	65%	3%
READING COMPREHENSION							
9. LITERAL	70%	75%	75%	79%	82%	82%	12%
10. INFERENTIAL	54%	57%	58%	58%	66%	66%	12%
11. EVALUATIVE	57%	61%	62%	66%	64%	64%	7%

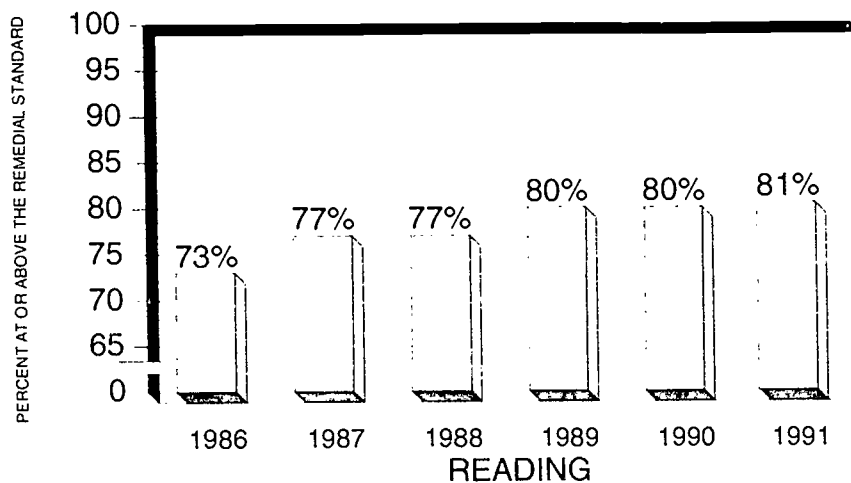
CHART 9
COMPARISON OF THE PERCENT OF STUDENTS
SCORING AT OR ABOVE THE REMEDIAL STANDARD
IN EACH SUBJECT AREA FOR 1986 THROUGH 1991



MATHEMATICS
GROWTH
SINCE 1986
5%

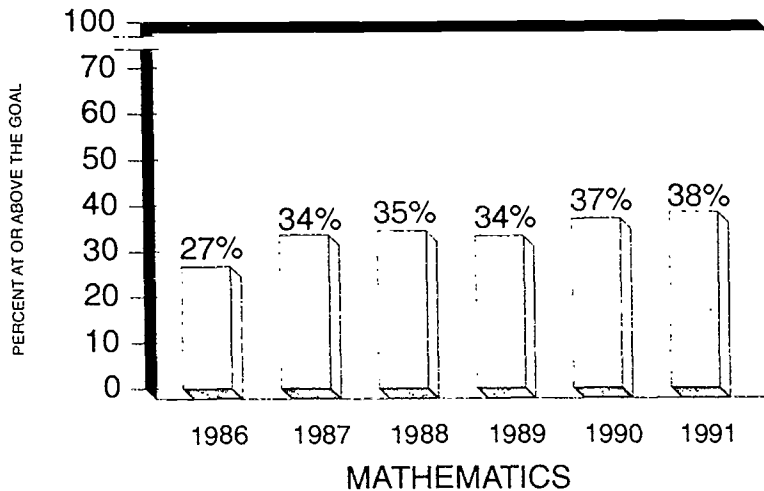


WRITING
GROWTH
SINCE 1986
10%



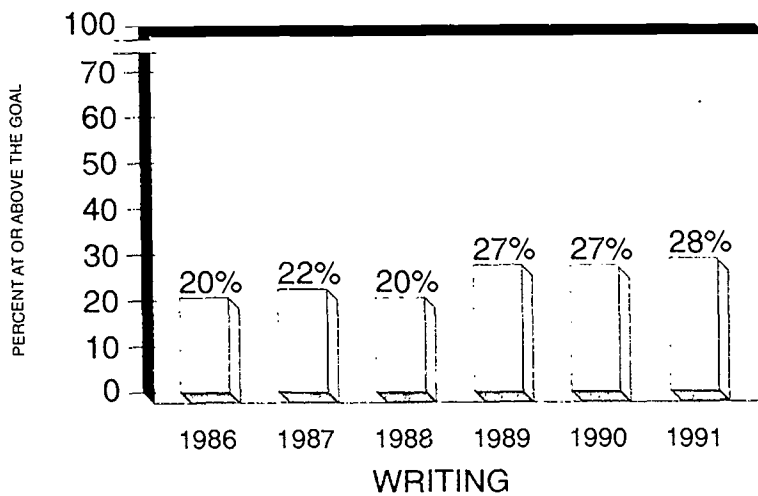
READING
GROWTH
SINCE 1986
8%

CHART 10
COMPARISON OF THE PERCENT OF STUDENTS
SCORING AT OR ABOVE THE GOAL
IN EACH SUBJECT AREA FOR 1986 THROUGH 1991



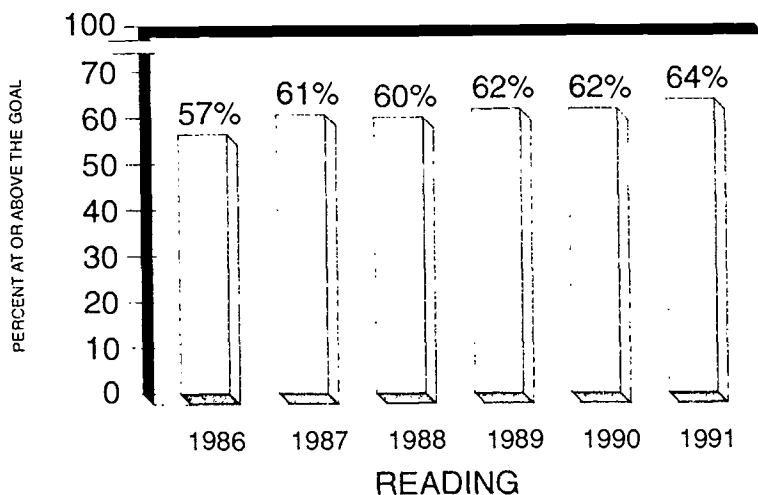
MATHEMATICS
GROWTH
SINCE 1986
11%

MATHEMATICS GOAL IS 31 OF
36 OBJECTIVES MASTERED



WRITING
GROWTH
SINCE 1986
8%

WRITING GOAL IS 7 ON
A SCALE OF 2 TO 8



READING
GROWTH
SINCE 1986
7%

READING GOAL IS 62 DRP UNITS
WITH 80% COMPREHENSION

CHART 11
COMPARISON OF STUDENT ACHIEVEMENT IN RELATION TO THE REMEDIAL STANDARDS
1986 THROUGH 1991 ADMINISTRATIONS

	1986		1987		1988		1989		1990		1991	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS AT OR ABOVE THE STANDARD:												
ON ALL THREE TESTS	19,233	62.3	20,466	67.5	19,727	66.0	20,987	72.0	22,334	72.9	22,858	72.5
ON TWO OF THE TESTS	5,695	18.5	5,204	17.2	5,459	18.3	4,570	15.7	4,669	15.2	4,628	14.7
ON ONE OF THE TESTS	3,576	11.6	3,137	10.4	3,147	10.5	2,595	8.9	2,694	8.8	2,848	9.0
ON NONE OF THE TESTS	2,345	7.6	1,502	5.0	1,539	5.2	1,003	3.4	960	3.1	1,193	3.8
STUDENTS BELOW THE STANDARD:												
ON ALL THREE TESTS	1,914	6.2	1,248	4.1	1,241	4.2	754	2.6	733	2.4	718	2.3
ON TWO OF THE TESTS	3,548	11.5	3,028	10.0	3,059	10.2	2,470	8.5	2,532	8.3	2,681	8.5
ON ONE OF THE TESTS	5,729	18.6	5,169	17.1	5,487	18.4	4,574	15.7	4,652	15.2	4,652	14.8
ON NONE OF THE TESTS	19,658	63.7	20,864	68.8	20,085	67.2	21,357	73.3	22,740	74.2	23,476	74.5
NUMBER OF STUDENTS TESTED	30,849		30,309		29,872		29,155		30,657		31,527	
NUMBER OF STUDENTS BELOW REMEDIAL STANDARD ON ONE OR MORE SUBTESTS (UNDULICATED COUNT)	11,191	36.3	9,445	31.2	9,787	32.8	7,798	26.7	7,917	25.8	8,051	25.5

CHART 12 COMPARISON OF STUDENT ACHIEVEMENT IN RELATION TO THE GOALS 1986 THROUGH 1991 ADMINISTRATIONS

	1986		1987		1988		1989		1990		1991	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STUDENTS AT OR ABOVE THE STATE GOAL:												
ON ALL THREE TESTS	3,214	10.4	3,858	12.7	3,545	11.9	4,341	14.9	4,899	16.0	4,855	15.4
ON TWO OF THE TESTS	6,578	21.3	7,768	25.6	7,493	25.1	7,036	24.1	7,953	25.9	8,730	27.7
ON ONE OF THE TESTS	8,715	28.3	8,104	26.7	8,030	26.9	7,851	26.9	7,597	24.8	8,279	26.3
ON NONE OF THE TESTS	12,342	40.0	10,579	34.9	10,804	36.2	9,927	34.0	10,208	33.3	9,663	30.6
STUDENTS BELOW THE STATE GOAL:												
ON ALL THREE TESTS	11,770	38.2	9,833	32.4	10,334	34.6	9,167	31.4	9,601	31.3	8,823	28.0
ON TWO OF THE TESTS	9,047	29.3	8,834	29.1	8,315	27.8	8,556	29.3	8,129	26.5	8,506	27.0
ON ONE OF THE TESTS	6,780	22.0	7,776	25.7	7,650	25.6	7,091	24.3	7,996	26.1	9,061	28.7
ON NONE OF THE TESTS	3,252	10.5	3,866	12.8	3,573	12.0	4,341	14.9	4,931	16.1	5,137	16.3
NUMBER OF STUDENTS TESTED	30,849		30,309		29,872		29,155		30,657		31,527	
NUMBER OF STUDENTS ABOVE GOAL ON ONE OR MORE SUBTESTS (UNDULICATED COUNT)	18,507	60.0	19,730	65.1	19,068	63.8	19,228	66.0	20,449	66.7	21,864	69.4

Normative Results

Normative information is provided to indicate how well the average student in Connecticut performs compared to a national sample of students. Norms have been available for the mathematics test, the language arts test and the reading comprehension test since 1987. This year, for the second year, normative information is also being provided for mathematics problem solving. These norms are based on links established between the CMT and the sixth edition of the Metropolitan Achievement Test (MAT-6). The norms are expressed in percentile ranks which provide estimates of group performance relative to the performance of the national MAT-6 norm group. Percentile ranks range from 1 to 99. A percentile rank of 50 represents the score that divides the norm group into two equal parts; half scoring below and half scoring above this value. Each reported percentile rank represents the performance of a nationally representative sample of students in relation to Connecticut student performance.

The following are the estimated norms for the grade eight statewide averages. In the content areas of total mathematics, language arts and reading comprehension (not DRP), data are provided for the 1987 through 1991 administrations. Normative information in the content area of mathematics problem solving is presented for the 1990 and 1991 administrations only.

Grade Eight

	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Total Mathematics	67	67	67	68	68
Language Arts	67	69	69	69	65
Reading Comprehension	57	57	59	61	59
Mathematics Problem Solving	—	—	—	64	68

Patterns in the data are summarized below.

- o In each content area, the mean national percentile rankings of Connecticut students substantially exceed the national average (50th percentile rank).
- o The norms for mathematics and language arts have remained similar over the five years with percentile ranks ranging from 65 to 69 in value. Reading comprehension performance is lower than either mathematics or language arts when compared to a national sample, with percentile ranks ranging from 57 to 61 over the five administrations.
- o The percentile ranks within each content area are quite stable across the five years, differing in value by no more than four points.

It should be pointed out that these norms provide a way to interpret the performance of the average Connecticut student relative to a national sample. They do not address the issue of how Connecticut, as a state, compares to other states. The fact that, in 1991, the average Connecticut student is at the 68th percentile in mathematics does not mean that the state as a whole would be in the 68th percentile if it were compared to other states. A state-by-state achievement testing program has been endorsed by the Council of Chief State School Officers (CCSSO) and the National Governors' Association

(NGA) and is in progress using the National Assessment of Educational Progress (NAEP) Program. Connecticut participated in the 1990 trial state assessment for mathematics at grade eight. Results of this assessment were released June 6, 1991 at a national press conference in Washington, D.C. In addition, Connecticut participated in the 1992 trial state assessment in grades four and eight.

Norms Available to Districts

Total mathematics, language arts, reading comprehension, and mathematics problem solving norms can also be provided for groups of students at the district level. Each year all districts are notified by the CMT contractor that norms for their own districts and/or schools within their districts are optionally available. In addition, districts are offered all materials and directions to hand-calculate norms for groups of students within their districts (e.g., Chapter I students). There is no charge for either of these services. Any district that requests this information receives it directly from the CMT contractor. No district receives normative information unless it is specifically requested by the superintendent. Approximately one half of Connecticut school districts have requested norms in the past.

Longitudinal Results

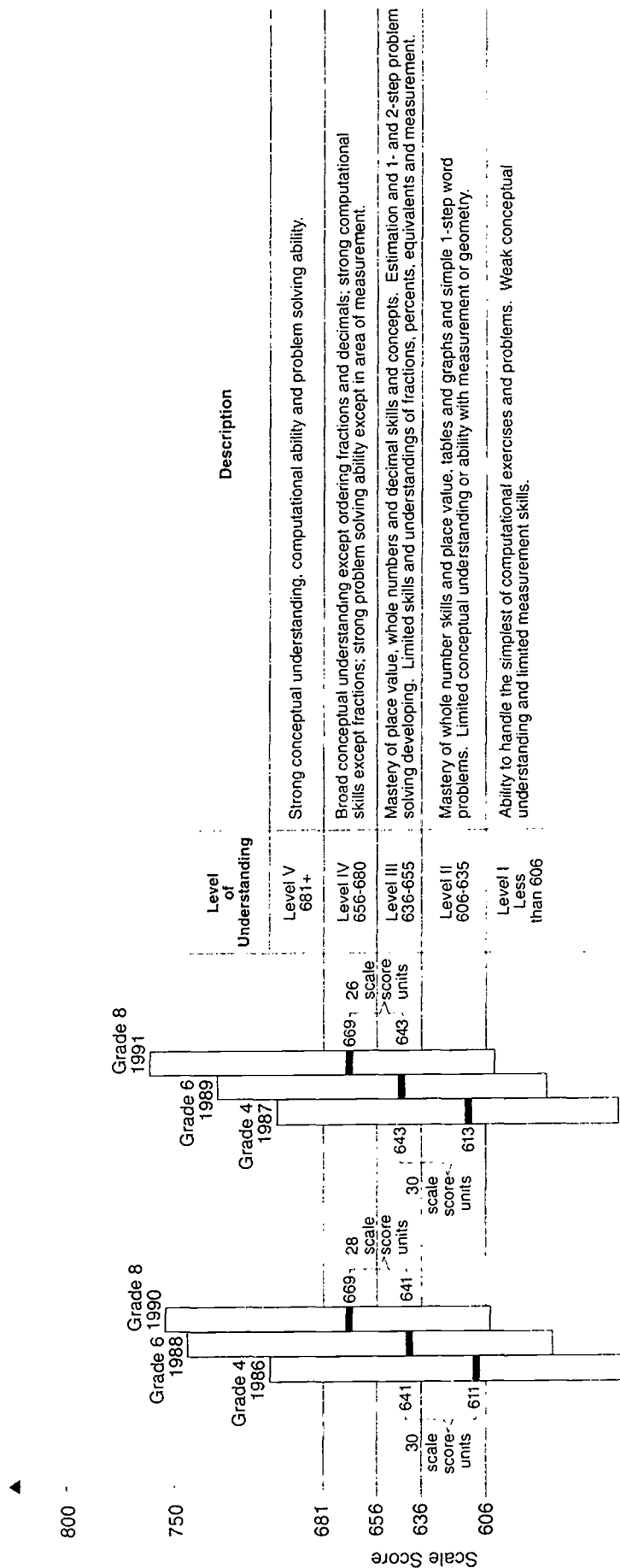
In order to interpret student performance across grade levels, vertical scales were developed in the areas of mathematics and reading comprehension. Scaled scores can be used to measure growth over time because CMT scores from all three grade levels have been placed on a common scale. These scales provide a means of monitoring students' academic progress from grade to grade. Before the scales were developed, it was difficult to assess the performance of groups of test takers as they moved from grade to grade because of differences in test length, curriculum content covered and levels of difficulty on the fourth-, sixth- and eighth-grade tests.

Since students who took the fourth-grade test in 1986 subsequently took the sixth-grade test in 1988 and the eighth-grade test in 1990, change in performance on the test can be assessed across four years' time for the group. Similarly, change in performance can be assessed for 1991 eighth graders who took the grade four test in 1987 and the grade six test in 1989. Chart 13 (p.30) and Chart 14 (p.31) present overall growth in performance for these students in the content areas of mathematics and reading comprehension, respectively. These results show meaningful growth in both mathematics and reading comprehension for the groups of students from grade four to grade six and from grade six to grade eight. Chart 13, for example, shows that the average statewide performance in mathematics, for the group of students who took the fourth-grade test in 1986, the sixth-grade test in 1988 and the eighth-grade test in 1990, has moved in a positive direction. While initial results are encouraging, it is premature to draw definitive conclusions about how much growth to expect as students progress from grade to grade. Such conclusions are possible only after the program has been in effect for several years. It should be noted that each eighth-grade group differs, to some extent, from its respective sixth-grade group and that each sixth-grade group differs from its respective fourth-grade group because some students entered, while other students exited the Connecticut public school system over the years.

CHART 13 MATHEMATICS (GRADE 4 TO GRADE 8)

Comparison of Average Statewide Mathematics Performance
Grade 4 (1986 Administration) to Grade 6 (1988 Administration) to Grade 8 (1990 Administration) and
Grade 4 (1987 Administration) to Grade 6 (1989 Administration) to Grade 8 (1991 Administration)
Using Scale Scores

Results for 1986 Grade 4 Cohort (Class of 1995) and
1987 Grade 4 Cohort (Class of 1996)



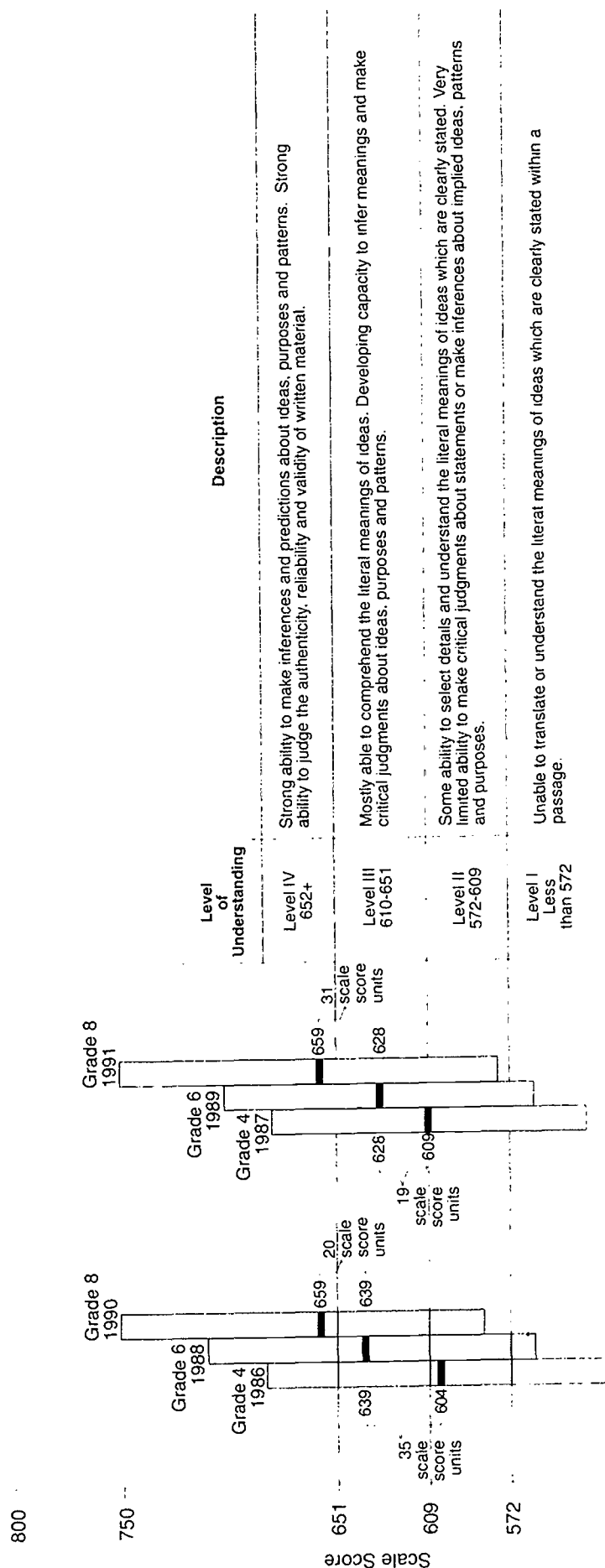
Approx. 95% of
Mathematics
Scores

Average
Statewide
Performance

CHART 14 READING COMPREHENSION (GRADE 4 TO GRADE 6 TO GRADE 8)

Comparison of Average Statewide Reading Performance
Grade 4 (1986 Administration) to Grade 6 (1988 Administration) to Grade 8 (1990 Administration) and
Grade 4 (1987 Administration) to Grade 6 (1989 Administration) to Grade 8 (1991 Administration)
Using Scale Scores

Results for 1986 Grade 4 Cohort (Class of 1995) and
1987 Grade 4 Cohort (Class of 1996)



Average
Statewide
Performance

Approx. 95% of
Reading
Scores

Participation Rate Results

Appendix L (p. 103) presents the number of eighth-grade students in each district and the percents of students who participated in the grade eight mastery testing during the fall 1991 statewide administration. Appendix L also shows the percent of students exempted from CMT testing. The alphabetical listing of districts provides the following information for each district:

Column 1	The name of the district
Column 2	The total eighth-grade population at the start of mastery testing
Column 3	The number of students eligible for testing
Column 4	The percent of total population exempted from testing
Columns 5-8	The percent of eligible students tested in each content area

The results in Appendix L illustrate that participation rates by school district on the eighth-grade CMT were quite high, with only a few exceptions. However, the high percentage of students exempted from the CMT, statewide, combined with the large variation in exemption rates among districts, has raised concerns about the fair application of exemption procedures and its impact on students. The Department has examined the impact of the exclusion provisions on the CMT programs for Special Education and bilingual students. The results from these analyses are available from the Division of Research, Evaluation, and Assessment.

APPENDIX A
Test Construction

Test Construction

The development of the eighth-grade criterion-referenced mastery test required the formation of seven statewide advisory committees. These included the Mathematics and Language Arts Advisory Committees, the Psychometrics Advisory Committee, the Bias Advisory Committee, the Connecticut Student Assessment Advisory Committee (formerly the Mastery Test Implementation Advisory Committee), and two standard-setting committees, one for mathematics and one for language arts. These committees were comprised of representatives from throughout the state. Members were selected for their area of expertise. Approximately 150 Connecticut educators participated on the mastery test committees which met over 80 times during the first 18 months of test development. (See Acknowledgements, p. v and p. 48.)

Beginning in the spring of 1985, content committees in both language arts and mathematics participated in each stage of the test development process, including assisting the State Department of Education in the selection of The Psychological Corporation as its test contractor. First, the content committees reviewed the curriculum materials prevalent throughout the state and the scope of the national tests in use in Connecticut at the respective grade levels. Additional resources included the Connecticut curriculum guides in mathematics and language arts, developed in 1981, as well as the results of recent Connecticut Assessment of Educational Progress (CAEP) assessments in mathematics and language arts. Next, the committees identified sets of preliminary mathematics and language arts objectives which reflected existing curriculum materials and the goals of the mastery testing program. The content committees defined an objective as an operationalized learning outcome that was fairly narrow and clearly defined.

Four criteria were used in identifying the appropriate learning outcomes or test objectives and in selecting specific test items to be included on the Grade 8 Connecticut Mastery Test (CMT). To have been considered for use, test objectives and items must have been:

- (1) significant and important;
- (2) developmentally appropriate;
- (3) reasonable for most students to achieve; and
- (4) generally representative of what is taught in Connecticut schools.

Once the objectives were identified, item specifications and/or sample items were written. Item specifications are written descriptions of the types and forms of test items that assess an objective. They also prescribe the types of answer choices that can be used with each item.

After the test specifications were written and agreed upon, the test contractor wrote items and response choices for each of the objectives. The items were then reviewed by the content committees. Items which met the criteria of the test specifications and received the approval of the content committees were considered for the pilot test. Before testing, the Bias Advisory Committee reviewed each item for potential discrimination related to gender, race, or ethnicity in the language or format of the question or response choices. After their review was completed, the pilot test forms were constructed. Over 1,600 customized Connecticut items were included in the October 1985 grade eight pilot test in language arts and mathematics.

The Psychometrics Advisory Committee provided advice concerning other aspects of the pilot test including the sampling design, statistical bias analysis, the design of item specifications and pilot test administration procedures. The recommendations proposed by the Psychometrics Advisory Committee were reviewed and endorsed by the Connecticut Student Assessment Advisory Committee.

Pilot Tests

After the items had been reviewed, twelve test forms (six in mathematics, and six in language arts) were piloted for the grade eight test. The purpose of several pilot test forms was to ensure that enough test items were included to construct three comparable test forms from the pilot test results.

Over 8,000 grade eight students participated in the October 1985 pilot test. In January 1986, the pilot test results were made available to Connecticut State Department of Education (CSDE) staff. The process of selecting items to construct three comparable test forms began by the Bias Advisory Committee examining the pilot test statistics of each item for potential bias. As a result, some items were eliminated from the item pool. From the remaining items, test forms were constructed to be equivalent in content and difficulty at both the objective and total test levels.

Once the items were sorted on this basis, the test contractor prepared three complete forms of the mathematics test and two complete forms of the language arts test. These forms were approved by the content committees. Each form was created to be equal in difficulty and test length. A third language arts test was constructed after a few additional items were piloted as part of a later test administration. Later, during subsequent CMT administrations, enough items were pilot tested to yield two additional test forms. The psychometric procedures used to construct each of these test forms focused primarily on the use of the one-parameter item response model.

Survey

In October 1985, a survey of preliminary grade eight mastery test objectives was sent to over 4,000 Connecticut educators. The purpose of the survey was to determine (1) the importance of the proposed mathematics and reading/language arts objectives, and (2) whether the objectives were taught prior to the beginning of grade eight. Approximately a 45% response rate was achieved which included approximately one-third of the respondents representing urban school districts. Thirty-six out of the original thirty-seven mathematics objectives were judged to be important learning skills.

APPENDIX B
Grade Eight Mathematics Objectives

Grade Eight Mathematics Objectives

The 36 objectives of the eighth-grade mathematics test are listed below. There are four test items for each objective. The number of items in each domain is indicated in the parentheses.

CONCEPTUAL UNDERSTANDINGS (44)

1. Order fractions
2. Order decimals
3. Round whole numbers
4. Round decimals to the nearest whole number, tenth and hundredth
5. Multiply and divide whole numbers and decimals by 10, 100 and 1,000
6. Identify fractions, decimals and percents from pictorial representations
7. Convert fractions to decimals and vice versa
8. Convert fractions and decimals to percents and vice versa
9. Identify points on number lines, scales and grids
10. Identify ratios and fractional parts from given data
11. Identify an appropriate procedure for making estimates with decimals and fractions

COMPUTATIONAL SKILLS (40)

12. Add and subtract whole numbers less than 10,000
13. Multiply and divide 2- and 3-digit whole numbers by 1- and 2-digit numbers
14. Add and subtract decimals (to hundredths) in horizontal form
15. Identify the correct placement of the decimal point in multiplication and division of decimals
16. Add and subtract fractions and mixed numbers
17. Multiply fractions and mixed numbers
18. Determine the percent of a number
19. Estimate sums and differences of whole numbers and decimals including making change
20. Estimate products and quotients of whole numbers and decimals
21. Estimate fractional parts and percents of whole numbers and money amounts

PROBLEM SOLVING/APPLICATIONS (with calculators available) (40)

22. Compute sums, differences, products and quotients using a calculator
23. Interpret graphs, tables and charts
24. Solve 1- and 2-step problems involving whole numbers and decimals, including averaging
25. Solve 1- and 2-step problems involving fractions
26. Solve problems involving measurement
27. Solve problems involving elementary probability
28. Estimate a reasonable answer to a given problem
29. Solve problems with extraneous information
30. Identify needed information in problem situations
31. Solve process problems involving the organization of data

MEASUREMENT/GEOMETRY (20)

32. Identify figures using geometric terms
33. Measure and determine perimeters and areas
34. Estimate lengths, areas, volumes and angle measures
35. Select appropriate metric or customary units and measures
36. Make measurement conversions within systems

Performance on all 36 math objectives is reported at the student, classroom, school, district and state levels.

APPENDIX C
Grade Eight Language Arts Objectives

Grade Eight Language Arts Objectives

There are eleven language arts objectives and two holistic measures, one for reading and one for writing, within the eighth-grade language arts test. The number of items for each content area or objective is indicated in the parentheses.

WRITING MECHANICS (39)

1. Capitalization and Punctuation (12)
2. Spelling (8)
3. Agreement (15)
4. Tone (4)

STUDY SKILLS (16)

5. Locating Information (12)
6. Note-taking and Outlining (4)

LISTENING COMPREHENSION (20)

7. Literal (4)
8. Inferential and Evaluative (16)

READING COMPREHENSION (36)

9. Literal (8)
10. Inferential (14)
11. Evaluative (14)

DEGREES OF READING POWER (77)

WRITING SAMPLE (1)

Holistic scoring is provided for all students. Analytic scoring is provided for students who score at or below the remedial standard of 4 (on a scale of 2-8).

Performance on all eleven Language Arts objectives, the Degrees of Reading Power and the Writing Sample is reported at the student, classroom, school, district and state levels.

APPENDIX D
Remedial (Grant) Standard-Setting Process
and
Standard-Setting Committees

Remedial (Grant) Standard-Setting Process

Background

There are several acceptable strategies for setting standards on criterion-referenced tests. Each of the proposed methods has one or more unique characteristics. One common element to the various methods is that they all offer to the individuals who are setting the standards some process which reduces the arbitrariness of the resulting standard. Different methods accomplish this in different ways. All methods systematize the standard-setting process so that the result accurately reflects the collective informed judgment of those setting the standard.

Types of Standard-Setting Methods

Standard-setting methods can generally be categorized into three types: test question review, individual performance review and group performance review. Test question review methods specify a procedure for standard setters to examine each test question and make a judgment about that question. For example, standard setters might be asked to rate the difficulty or the importance of each question. These judgments are then combined mathematically to produce a standard. Individual performance review methods also require standard setters to make judgments, but the judgments are made on the basis of examining data that indicate how well individual students perform on test items. These data may be based on actual pilot test results or projected results using mathematical theories. In this method, additional student information, such as grades, may also be used to inform the standard setters. Group performance review methods provide for judgments to be made based on the performance of a reference group of students. That is, standard setters review the group performance and make a determination where the standard should be set based on the group results.

Selection of a Standard-Setting Method

Several factors affect the choice of a particular standard-setting method. The type of test is one consideration. For example, some methods are only appropriate for multiple-choice questions or for single correct answer questions while other methods are more flexible. For example, time constraints are a consideration if student performance data are necessary. In this case, a pilot test must be conducted and the test results must be analyzed prior to setting the standards. Another consideration is the relative importance of the decisions that will be made on the basis of the standard. For example, a classroom test affecting only a few students would not require as stringent a procedure as would a statewide test determining whether a student is allowed to graduate from high school. Other relevant factors include the number of test items, permanence of the standard, purpose of the test and the extent of available financial and other resources to support the standard-setting process.

On February 4, 1985, the Mastery Test Psychometrics Committee met to consider the issue of standard-setting procedures and voted unanimously to approve the following proposal.

A PROPOSAL FOR SETTING THE REMEDIAL STANDARDS ON THE CONNECTICUT MASTERY TESTS

1. Two standard-setting committees will be created: one for mathematics and one for reading and writing.
2. This description of a minimally proficient student will be given to each of the committees:

Imagine a student who is just proficient enough in reading, writing and mathematics to successfully participate in his/her regular eighth-grade coursework.

- 3.a. In mathematics, an adaptation of the Angoff procedure will be used. The committee will be provided with each item appearing on one form of the mathematics test. The committee will be given the following directions:

Consider a group of 100 of these students who are just proficient enough to be successful in regular eighth-grade coursework. How many of them would be expected to correctly answer each of the questions?

The committee will rate each item. The committee will then be given the opportunity to discuss their rating of each item. Sample pilot data will be presented. Committee members will be given the opportunity to adjust their item ratings. The item ratings will then be averaged in accordance with the Angoff procedure in order to produce a recommended test standard.

- b. In reading, the committee will review and discuss each passage of the Degrees of Reading Power (DRP) test. Student performance data will be presented. The committee will consider the reading difficulty that should be expected of a student at the grade level being tested. The committee members will identify the passage that has the appropriate level of reading difficulty consistent with the above description of a minimally proficient student.
 - c. In writing, the committee will read four sample essays. These essays will have been prescored holistically (on a scale from 2 to 8) in order to rank the quality of the essays. Committee members will classify essays into one of three categories: 1) definitely NOT proficient, 2) borderline and 3) definitely proficient. These classifications will be discussed in light of the holistic scores. The committee will then classify approximately twenty-five additional essays. The essay ratings will be discussed in the same manner as the original four essays. When all essays have been discussed, the essays which fell in the borderline category will be focused upon to determine the standard. The committee will determine where, among the borderline essays, the standard should be established.
4. The standards recommended in step 3 will be presented to the Connecticut Student Assessment Advisory Committee (formerly the Mastery Test Implementation Advisory Committee) for discussion and action.

Connecticut's Strategy

Several steps were employed to create an acceptable and valid test standard for Connecticut tests. Initially, a separate standard-setting committee was convened for each test on which standards were to be set. Individuals were chosen to serve as members on the committee on the basis of their familiarity with the area being assessed and the nature of the examinees. One source of such members was the test content committees related to the project. For example, members of the Mathematics Advisory Committee were represented on the committee setting standards for the mathematics mastery test.

The actual procedures used to set standards were an adaptation of a method proposed by William Angoff (1970). This test question review method required members of a standard-setting committee to estimate the probability that a question would be correctly answered by examinees who possess no more than the minimally acceptable knowledge or skill in the areas being assessed. Standard setters then reviewed pilot test data for sample items as further evidence of the appropriateness of the judgments being made. The original probability estimates assigned to each test question were reviewed and adjustments made by the standard setters. The final individual item probabilities were summed to yield a suggested test standard for each member of the committee. The suggested standards were averaged across members of the committee to produce the recommended test standard.

The recommended test standard was presented to the Connecticut Student Assessment Advisory Committee and the State Board of Education.

In mid-March, Mathematics and Language Arts Standard-Setting Committees met to set the remedial standards for the Grade 8 Mastery Test. The following information summarized the results of the standard-setting activities conducted by CSDE staff:

I. Mathematics (144-item test)

Using the procedures previously outlined, the standard setters rated each item and considered the pilot data. Committee members discussed items and were given the opportunity to adjust their initial ratings. The final ratings were averaged to produce a remedial standard. It was recommended that a raw score of 79 be the remedial mathematics standard. Below is a summary of the ratings.

<u>Procedure</u>	<u># Judges</u>	<u>Range %</u>	<u>Mean % Correct</u>	<u>Raw Score</u>
Angoff	20	25.7-67.7	54	78

II. Reading (Degrees of Reading Power, 77-item test)

Standard setters used two procedures to establish a remedial reading standard. First, they examined the passages in the Degrees of Reading Power (DRP) test, asking themselves which passage is too difficult for the student who is just proficient enough to successfully participate in eighth-grade coursework. Discussion occurred throughout this selection process.

Second, they examined textbooks which are typically used in grades seven and eight and selected those textbooks which a minimally proficient student would not be expected to read in order to successfully participate in eighth-grade coursework. Discussion occurred throughout this selection process.

The average readability values of the selected passages and textbooks and the pilot test data were then revealed to the standard setters. The standard setters discussed the readability values and the pilot test data and recommended the DRP unit score of 55 as the remedial standard. The standard was accepted by the State Board of Education at the 80% comprehension level. Below is a summary of the ratings.

<u>Procedure</u>	<u># Judges</u>	<u>Readability Range</u>	<u>Recommended Remedial Standard</u>
A. Test Passage Review	26	53-62 DRP Units	55 DRP Units
B. Textbook Review	26	48-60 DRP Units	

III. Writing (45-minute writing sample)

Using the procedure previously outlined, standard setters read and rated 21 essays written to a persuasive prompt and 21 essays written to an expository prompt. After discussions and final ratings, the holistic scores for the papers were revealed to the group. The committee then discussed the appropriate remedial writing standard in light of the degree to which their ratings matched the holistic scores. It was the recommendation of the committee that a holistic writing score of 4 be used as the remedial writing standard. Below is a summary of the ratings.

<u>PERSUASIVE PROMPT</u>			
<u>Rating After Discussion</u>			
<u>Holistic Score</u>	<u>Definitely NOT Proficient</u>	<u>Borderline</u>	<u>Definitely Proficient</u>
2	100%	0%	0%
3	69%	0%	31%
4	27%	1%	72%
5	0%	0%	100%
6	6%	0%	94%
7	1%	0%	99%
8	0%	0%	100%

<u>EXPOSITORY PROMPT</u>			
<u>Rating After Discussion</u>			
<u>Holistic Score</u>	<u>Definitely NOT Proficient</u>	<u>Borderline</u>	<u>Definitely Proficient</u>
2	100%	0%	0%
3	99%	0%	1%
4	17%	1%	82%
5	22%	0%	78%
6	0%	0%	100%
7	0%	0%	100%
8	0%	0%	100%

Standard-Setting Committees

LANGUAGE ARTS STANDARD-SETTING COMMITTEE

Dell Britt, Newtown Public Schools
Fred Brucoli, New London Public Schools
Patricia Dobson, Stafford Public Schools
Donald Falcetti, Litchfield Public Schools
Bill Farr, Bolton Public Schools
James Foley, Waterbury Public Schools
Dorothy French, Litchfield Public Schools
Marguerite Fuller, Bridgeport Public Schools
Sara Godek, Stafford Public Schools
Nina Grecenko, Newtown Public Schools
Mary Haylon, Hartford Public Schools
Karen Karcheski, Danbury Public Schools
Robert Kinder, CT State Department of Education
Jean Klein, Newtown Public Schools
Mark Kristoff, New London Public Schools
Thomas Lane, Old Saybrook Public Schools
Lucretia Leeves, Hartford Public Schools
Edward Moore, Danbury Public Schools
Mary Murray, Putnam Public Schools
Dick Nelson, Old Saybrook Public Schools
Olive S. Niles, East Hartford Public Schools
Anne L. Rash, Bolton Public Schools
Bernice Wagge, Waterbury Public Schools
Mary Weinland, CT State Department of Education
Mary Wilson, Hartford Public Schools
Barbara Zamagni, Putnam Public Schools

MATHEMATICS STANDARD-SETTING COMMITTEE

Barbara Bailey, New Haven Public Schools
Pat Banning, Windham Public Schools
George Caouette, Manchester Public Schools
Pearl Caouette, Manchester Public Schools
Betsy Carter, CT State Department of Education
Tony Ditrio, Norwalk Public Schools
Don Flis, West Hartford Public Schools
Marian Frascino, Norwalk Public Schools
Charles Framularo, Bridgeport Public Schools
Sheryl Hershonick, New Haven Public Schools
Steve Leinwand, CT State Department of Education
Mable McCarthy, Middletown Public Schools
Michele Nahas, Windham Public Schools
Judy Narveson, Farmington Public Schools
Mary Ann Papa, West Hartford Public Schools
Jim Pinto, Bloomfield Public Schools
Helen Prescott, Ashford Public Schools
Dolores Vecchiarelli, Westport Public Schools
Sylvia Webb, Middletown Public Schools
Frank Whittaker, Bridgeport Public Schools

APPENDIX E

Grade Eight Overview of Holistic Scoring

and

Marker Papers for Holistic Scoring

An Overview of Holistic Scoring

Description of the Method

Holistic scoring involves judging a writing sample for its total effect. The scorer makes an overall evaluation taking into account all characteristics which distinguish good writing. No one feature (such as spelling, rhetoric, or organization) should be weighted to the exclusion of all other features. Contributing to the rationale underlying holistic scoring is evidence that:

- o no aspect of writing can be judged independently and result in an overall score of quality;
- o teachers can recognize and concur upon good writing samples; and
- o teachers tend to rank entire pieces of writing in the same way, regardless of the importance they might attach to the particular components of writing.

The scoring scale for holistic scoring is determined by the quality of the specific samples being evaluated. That is, the success of a particular response is determined in relationship to the range of ability reflected in the set of writing samples being assessed.

Preparation for Scoring

Prior to the training/scoring sessions, a committee consisting of Connecticut State Department of Education (CSDE) consultants, representatives of the Language Arts Advisory Committee and other language arts specialists from throughout the state, two chief readers and a project director from Measurement Inc. of Durham, North Carolina, and a reading specialist from The Psychological Corporation met and read a substantial number of essays drawn from the total pool of essays to be scored. Approximately 60 essays were selected to serve as "range-finders" or "marker papers" representing the range of achievement demonstrated in the total set of papers. Copies of those range-finders served as training papers during the scoring workshops which followed. Each range-finder paper was assigned a score according to a four-point scale, where 1 represented a poor paper and 4 represented a superior paper.

Scoring Workshops

During the month of November, several holistic scoring workshops were held in various locations throughout the state. Attendance at the grade eight scoring workshops totaled 253 teachers. A chief reader and two assistants were present at every workshop in addition to representatives of the CSDE. Each workshop consisted of a training session and a scoring session.

Training and Qualifying

- o All teachers were shown approximately fourteen range-finder papers. The chief reader discussed each paper and explained the reason why each received its score.

- o All teachers were given a six-paper practice set. They scored the papers independently and recorded the scores on their papers. When all teachers were finished, the chief reader discussed each paper and explained why each received its score.
- o All teachers were given a nine-paper training set. They scored the papers independently, based on an overall impression, and recorded their scores on a monitor sheet as well as on their papers. As they finished reading and scoring, they brought the monitor sheet to the team leader who checked the scores. When all teachers were finished and all monitor sheets were checked, the chief reader discussed the nine-paper set.
- o Regardless of whether or not they qualified on the first training set, all teachers were then given another nine-paper training set. They scored the papers and had the monitor sheets checked. Set Two was not discussed, except with non-qualifiers.
- o Teachers were considered qualified if they scored six or more papers correctly on either set. Teachers who met the standard began scoring actual test papers after Set Two.
- o If any teacher did not qualify, they received additional training by one of the team leaders or by the chief reader away from the scoring room. They had two more opportunities to qualify. Any teacher who failed to qualify would have been excused from the project and paid for one day.

The Scoring Session

Once scorers qualified, actual scoring of the writing exercises began according to the steps outlined below:

- o Scorers read each paper once carefully but quickly and designated a score. Again, the score reflected the scorer's overall impression of the response as it corresponded with the features of written composition which were internalized during the training process.
- o Each paper was read and scored by a second scorer independently of the first, that is, without seeing the score assigned by the first reader. The chief reader had the responsibility of adjudicating any disagreement of more than one point between the judgments of the first two scorers. In other words, adjacent scores (i.e., awarded scores of 4 and 3, 1 and 2, 2 and 3) were acceptable, but larger discrepancies (i.e., scores of 2 and 4, 3 and 1, 1 and 4) were resolved by the chief reader. In general, with successful training, the occurrence of large score discrepancies is rare.
- o The two scores for each paper were added to produce the final score for each student, resulting in scores between 2 and 8.

Understanding the Holistic Scores

Examples of actual student papers which are representative of the scoring range will assist the reader in understanding the statewide standard set for writing and interpreting the test results. Sample papers representing four different holistic scores are presented on the following pages. Note that the process of summing the scores assigned by the two readers expands the scoring scale to account for "borderline" papers. A paper which receives a 4 from both scorers (for a total score of 8) is likely to be better than a paper to which one reader assigns a 4 and another reader assigns a 3 (for a total score of 7). In addition, it should be emphasized that each of the score points represents a range of student papers--some 4 papers are better than others.

A score of Not Scorable (NS) was assigned to student papers in certain cases. A score of NS indicates that the student's writing skills remain to be assessed. The cases in which a score of NS was assigned were as follows:

- o responses merely repeated the assignment;
- o illegible responses;
- o responses in languages other than English;
- o responses that failed to address the assigned topic in any way; and
- o responses that were too brief to score accurately, but which demonstrated no signs of serious writing problems (for example, a response by a student who wrote the essay first on scratch paper and who failed to get very much of it copied).

Both readers had to agree that a paper deserved a NS before this score was assigned. If the two readers disagreed, the Chief Reader arbitrated the discrepancy. Papers which were assigned a score of NS were not included in summary reports of test results.

Summary Comments

The fact that standards must be maintained and reinforced throughout a scoring session cannot be overemphasized. Holistic scoring depends for its usefulness on consistency of scoring among all scorers throughout the sessions.

CONNECTICUT MASTERY TEST
1991 Grade Eight
Writing Assignment

A 16-year-old friend is thinking about dropping out of school. Should people this age quit school? You want to persuade your friend to have the same opinion about quitting school that you have. How would you persuade your friend?

- Think about all the reasons for and against dropping out of school.
- Decide whether you think dropping out of school is good for 16-year-olds.
- Write an essay to persuade your friend to agree with your decision.

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at age 16 you would drop out of school because then you would need school so that you could get your high school diploma and so that you could find a work and if I have a friend I will tell her please don't quit school because then you are going to be selling drugs and all that stuff well that's why you can't quit school now.

SCORE POINT: 1

This brief response has one reason (get a diploma) extended with two pieces of information (work; selling drugs). More elaboration or a lengthier list of reasons is required for a higher score.

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Do not drop of school because you not going to great a nice job. People thing you are a dumb. If you finish school you can't find a nice job by a new car and a big house. Do not drop of school so you can have a good life and be some one special in the future. You can be the government or the mayor or something like a mayor. May be you can be a computer Master or a owner of a store or something in your dreams. Another thing drugs destroy dreams.

Score Point: 1

The writer has made a choice about dropping out of school and attempted to give reasons. The reasons, however, are presented in a disjointed and unclear manner. More connections between the reasons or more elaboration is needed for a higher score.

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I think dropping out of school isn't right because all your friends will go to college and get their degree. Then they will be smarter, they will have better jobs, and they will be able to support a family. They also will be able to do many things such as going on vacations, going to fancy restaurants, having their cars and a big house.

If you drop out you could never have to go to school again and you could always get a job as a garbage collector.

I would think real hard about dropping out if you do you could really mess up your life.

Score Point: 2

This writer uses cause and effect in the elaboration of what will happen if you drop out of school. The repercussions are specific in detail, but to receive a higher score, the second reason (garbage collector) needs more elaboration.

--	--	--	--	--

I think that you should stay in school because sixteen is too young. If you dropped out now it would be harder on yourself. Just think about your future. You probably would be living by yourself. You wouldn't be living well without getting a good job. You couldn't pay your bills either.

If you drop out of school now without a diploma your going to be lost. You'll be living like a bum. Because without a diploma you get a job. And when your living by yourself your main concern is to get a good paying job to pay for things like rent, groceries, and bills. When you get married and have a family its just going to be alot tougher than its going to be. Because your going to have to support the family

and you probably won't be able to support yourself. So I think you should stay in school, get a diploma and go at least two years of college. Because if you do that would make life so much easier on yourself. But its your life and your decision, you pick your choice.

Score Point: 2

This writer takes a stand (stay in school), and gives reasons (harder life; not a good job; pay bills) in the first paragraph. This information is repeated in the next three paragraphs with very little additional information or elaboration given. The overall amount of information remains minimal.

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I think that it is a bad idea for you to drop out of school for many reasons. One is the money. The other is the parents will be mad and how do you expect to get a job without a high school diploma? Besides if you drop out what would you do? There are not alot a six-teen year old can do when you drop out from school. Most high school drop outs become bums and live on the streets and you don't want that. Why do you want to drop out anyway? You get good grades and you are one of the most popular kids in school. If you drop out think of all the things you will be missing such as the prom and the dance and you cost mess graduation. If you drop out the only job you could get is working at

a fast food restaurant, but if you graduate you can get a much better job. If you think it will be easy if you drop out you are kidding your self because your parents aren't going to want you to live at their house if you aren't going to school so you are going to have to find a place to live and that costs money. If you are really having a problem you should talk to a counselor in school instead of dropping out. I hope it changed your mind about dropping out

SCORE POINT: 3

This writer demonstrates the ability to sustain persuasive writing. Three reasons (what bad things will happen; what you will miss; results of no job) are given to support staying in school. The paper is organized and clear.

--	--	--	--	--

I think it is wrong to even think about dropping out! You have your whole life ahead of you. You only have a year or two before you finish high school. If you really hate it, then you don't have to go to college. You'll be better off in the long run, if you do go. If you graduate from college, you can get a good job and have a better life. If you drop out, and try to get a job, you'll probably end up being a bag boy at a supermarket or something. You just have to try, you don't have to be the top of your class or anything. But for me at least try. Dropping out is wrong, because you'll either end up being homeless or on "America's Most Wanted!" It's no joke, stay in school, it's your best move. Don't you want a family, a nice house, and a good job to make people proud. There are so many things to look forward to. You 16-years-old, god man your still a kid, can't you understand how dumb your being. No, I don't think you should drop out now or ever for that matter. I'm not saying become a doctor and go to school for 10 more years. But at least stick it out until you graduate. You may think I'm being to hard on you, but I tell strongly about this. I don't really have anything else to tell you, expect "don't be stupid, stay in school!"

Score Point: 3

This response is very persuasive but requires more elaborated reasons to achieve a higher score. The writer gives four or five different results of dropping out of school (bag boy; most wanted) but does not discuss any of them in detail.

--	--	--	--	--

Today I will be writing you this composition to try and persuade you to want to stay in school. My reasons are listed below, hopefully you will change your mind.

First of all, you would be able to drop out of school, you have a lot of friends and are in moderate grades. You are in the captain of the football team. I know you told me you didn't like school but I didn't know you didn't like it at all. What will your parents say if you know your father wants you to go to college.

Now I would like to tell you about what happens to most kids drop out of school. After dropping out most of the kids go to drug and that leads to stealing for the money to buy the drugs. I know you don't do drugs or steal but it could happen if you don't have someone to go when they talk about drugs and teach you other things you need to survive in the real world.

Lets talk about how your life would be when you grow up without an education. You will be able to get a job without a high school diploma. I know there are jobs you can get without a diploma, but they are dead end jobs. If you do become a

foot ball star like you want to be, how will you know since not getting ripped off. You might deserve two million but only got one million because you are not good in math, and couldn't figure out how much fifteen percent was so your agent took fifty-five percent. What about your kids when they ask you to help them with their homework but you can't. What are you going to do keep turning them away. How about when you go shopping you won't be able to figure out how much money you owe the cashier.

I think sixteen years old should not drop out of school. They are not mature enough to face the real world. They will be faced with many difficult questions and choices for their age. Things such as finding a place to live and getting a job.

Hopefully, by listening to what I said you will change your mind and will stay in school. They were brief but to the point, and as you being my friend I know you will change your mind.

SCORE POINT: 4

This response is organized and controlled. The response is directed to a personal friend, and the writer elaborates on this particular friend's good qualities, feelings on drugs, ambitions and maturity level. These four areas are explained using specific detail (football team) and cause and effect (being ripped off by an agent).

--	--	--	--	--

Dear friend,

I think you should not drop out of school. You need an education to get through life. I think you should not drop out of school because there's where you meet all your friends, there's where you learn there's where you learn at in school. You want to be a rich person, have a house, have a BMW and a Mercedes. If you drop out of school you can't get a good high paying job.

If you drop out you can't go to college and you want to play football for the DAVE but if you drop out you won't even get accepted to a college. Don't throw your life away on the streets. It won't get you anywhere. The streets will get you into some drugs and death. You want to be a good football player, be a college team, they don't draft you from the corner on street they draft you from high school. Beside if you drop out you just gonna be another person on the street.

If you want to be a difference in your life stay in school, if you want people to look up to you like they do to Lawrence Taylor stay in school. People don't like bums you don't get a job when you can't read and count. In school is where you learn to read so you feel safe can't get shot, stabbed or get rolled on like on the street. In school you always get to fight back but with your mind you brain you more powerful than any five iron or knife or fist. The only way people will look up to you is to stay in school.

If you want to be rich have a house and two cars then you get to work for it. You want your phone tapped or S.O. following you everywhere you just because you drive a fancy car that you didn't wait for. If you not in school right now people think negative of you, even if you have a job they say there goes another hoodlum. Stay in school and make something of your life so you can be anything you want if you finish school.

SCORE POINT: 4

Page 6

This response is well-organized and controlled with sufficient development to achieve a "4". The writer builds the arguments with clear and specific information (high paying job; college) and fluent discussions about making a difference in your life and making something of your life. This results in full development of the writer's intent.

APPENDIX F
Grade Eight Analytic Rating Guide
and
Marker Papers for Analytic Scoring

Grade Eight Analytic Rating Guide

FOCUS: How effectively does the writer unify the paper by a dominant topic?

- 1 = switches and/or drifts frequently from the dominant topic
- 2 = switches and/or drifts somewhat from the dominant topic
- 3 = stays on topic throughout the response

ORGANIZATION: Is there a plan that clearly governs the sequence from the beginning to the end of the response, and is the plan effectively signaled?

- 1 = no discernible plan
- 2 = inferable plan and/or discernible sequence; some signals may be present
- 3 = controlled, logical sequence with a clear plan

SUPPORT/ELABORATION: To what extent is the narrative developed by details that describe and explain the narrative elements (character, action and setting)?

- 1 = vague or sketchy details that add little to the clarity of the response or specific details but too few to be called list-like
- 2 = details that are clear and specific but are list-like, or uneven, or not developed
- 3 = somewhat developed details that enhance the clarity of the response

CONVENTIONS: To what extent does the student use the conventions of standard written English (e.g., sentence formation, spelling, usage, capitalization, punctuation)?

- 1 = many errors
- 2 = some errors
- 3 = few errors

--	--	--	--	--

I would invite my friend not to
drop out of school cause school
is fun and you have lots of friends
how many you have needed. But for
a 16 year old it's not good to
drop out not even in a way
way. Now when you need
to help me are there for you

I hope that you agree with my decision
because dropping out of school it's
not fun with it. Every its group
and people messes to you.
That's why you should
never drop out of school its
more dangerous but there
the is here.

FOCUS: 3

ORGANIZATION: 2

SUPPORT/ELABORATION: 1

CONVENTIONS: 1

--	--	--	--	--	--

The Drop outs

I think that if you drop out that could be a bad mistake for you because you might be a nazi, and make you will end up selling drugs. I want about a wife or good family

A. Drugs

B. Nazi

C. wife family

FOCUS: 2

ORGANIZATION: 2

SUPPORT/ELABORATION: 1

CONVENTIONS: 2

I believe that you might want to drop out because you don't want to hang around in your house want you to drop out to be old or cool. Oh make to much homework or you are to sleep.

A. Homework C. Bad

B. Sleep D. Hangaround

--	--	--	--	--

Dear _____

Why are you gonna
drop out of school? You
must have your reasons but
don't you think that dropping
out of school at the age of
16 is rushing and early?
First of all
I know how you're feeling
because I went through the
same thing. I'm confusing but
I got over it after I was
told all the things that
could happen to you when
you drop out. There are a lot
of negative reasons like, you
can't really get jobs without
going to school for at
least 12 years.
Secondly, you probably
might be dropping out
because of your family
might be in debt or your
having problems of your
own. Dropping out of school
won't get you anywhere
anyway, I hope you

will consider staying in
school. You could always get
a job after school for part
time. If you still gonna
drop out I'll understand
and always be your
friend

Your friend

FOCUS: 3

ORGANIZATION: 3

SUPPORT/ELABORATION: 1

CONVENTIONS: 3

APPENDIX G

Sample Grade Eight Mastery Test Score Reports

- o Class Diagnostic Report
 - Mathematics
- o School by Class Report
 - Mathematics
- o District by School Report
 - Mathematics
- o Class Diagnostic Report
 - Language Arts
- o School by Class Report
 - Language Arts
- o District by School Report
 - Language Arts
- o Parent/Student Diagnostic Report

CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

MATHEMATICS PART 1 OF 2

PAGE 3

TEACHER: G S
GROUP CODE: 75931
SCHOOL: E
SCHOOL CODE:
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 08 FORM: D

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 29

NUMBER OF STUDENTS NEEDING
FURTHER DIAGNOSIS
IN MATHEMATICS : 7

OBJECTIVES

CONCEPTUAL UNDERSTANDINGS

1. Order fractions
2. Order decimals
3. Round whole numbers
4. Round decimals to the nearest 1, .1, .01
5. Mult/div whole #'s/dec by 10, 100, 1000
6. Identify frac/dec/percent from pictures
7. Convert fractions--decimals
8. Convert fractions--decimals--percents
9. Identify points on # lines/scales/grids
10. Identify ratios and fractional parts
11. Identify procedure--frac/dec estimation

COMPUTATIONAL SKILLS

12. Add and subtract whole numbers
13. Multiply and divide whole numbers
14. Add and subtract decimals
15. Id corr place of dec point in mult/div
16. Add/subtract fractions and mixed numbers
17. Multiply fractions and mixed numbers
18. Determine the percent of a number
19. Est sum/diff of whole #'s and decimals
20. Est prod/quot of whole #'s and decimals
21. Est frac parts/percents of whole #'s

NUMBER OF STUDENTS TESTED: 29		NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS IN MATHEMATICS : 7																		NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT																	CLASS #/%	SCHOOL #/%	DISTRICT #/%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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5 INDICATES A SCORE AT OR ABOVE THE STATE GOAL

■ INDICATES A SCORE BELOW THE REMEDIAL STANDARD THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

▲ = ABSENT
V = VOIDCopyright © 1991, 1990, 1987 by the Connecticut State Department
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COPY 1

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PROCESS NO. 19150156-3578-06922-1

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CLASS DIAGNOSTIC REPORT

CONNECTICUT MASTERY TESTING PROGRAM

TEACHER: G S
GROUP CODE: 75931
SCHOOL CODE: E
SCHOOL CODE: B DISTRICT
DISTRICT CODE:

GRADE: 08 FORM: D

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 29

NUMBER OF STUDENTS NEEDING
FURTHER DIAGNOSIS : 7
IN MATHEMATICS :

OBJECTIVES

PROBLEM SOLVING AND APPLICATIONS

22. Add/sub/mult/div with a calculator
23. Interpret graphs, tables and charts
24. Solve 1-, 2-step prob-whole #'s/decimals
25. Solve 1- and 2-step problems-fractions
26. Solve problems involving measurement
27. Solve prob's with elementary probability
28. Estimate a reasonable answer
29. Solve problems with extraneous info
30. Identify needed information in problems
31. Solve process problems - organizing data

MEASUREMENT AND GEOMETRY

32. Identify figures using geometric terms
33. Measure/determine perimeters/areas
34. Est length/area/volume/angle measure
35. Pick approx metric/cust measures & units
36. Conversion within measurement systems

MASTERY
CRITERIA
OF ITEMS
CORRECT

3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4
3 of 4

	T	E	T	A	B	I	N	E	A	T	M	A	R	O	J	E	S	M	I	NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE		
																				CLASS	SCHOOL	DISTRICT
																				%	%	%
																				28/97	99/98	1179/98
																				20/69	69/68	773/64
																				16/55	59/58	703/58
																				6/21	32/32	365/30
																				3/10	22/22	210/17
																				17/59	61/60	440/36
																				22/76	72/71	807/67
																				11/38	44/44	455/38
																				15/52	63/62	663/55
																				6/21	33/33	395/33
																				11/38	36/36	427/35
																				2/7	16/16	147/12
																				12/41	57/56	571/47
																				17/59	56/55	793/66
																				7/24	29/29	278/23
TOTAL NUMBER OF OBJECTIVES MASTERED																				AVERAGE NUMBER OF OBJECTIVES MASTERED (#% AT/ABOVE STATE GOAL)		
[Mathematics State Goal = 31 of 36 objectives mastered]																				18.2	20.1	18.3
																				(2/7)	(12/12)	(88/8)
NUMBER OF ITEMS CORRECT																				#% BELOW REMEDIAL STANDARD		
[Mathematics remedial standard = 78 of 164 items correct]																				7/24	20/21	405/35

\$ INDICATES A SCORE AT OR ABOVE THE STATE GOAL

* INDICATES A SCORE BELOW THE REMEDIAL STANDARD THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

A = ABSENT
V = VOIDCopyright © 1991, 1990, 1987 by the Connecticut State Department
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SCHOOL BY CLASS REPORT

CONNECTICUT MASTERY TESTING PROGRAM

GRADE: 08 FORM: D TEST DATE: 09/91

SCHOOL: E

SCHOOL CODE:

DISTRICT: B DISTRICT

DISTRICT CODE:

Scores indicate Number/Percent of students mastering each objective

MATHEMATICS

PART 1 OF 2

NUMBER OF STUDENTS TESTED		75931		75932		75933		75934	
OBJECTIVES	MASTERY CRITERIA	%	%	%	%	%	%	%	%
CONCEPTUAL UNDERSTANDINGS									
1. Order fractions	3 of 4	11/38	3/17	10/37	18/78	42/43	459/39	101	1218
2. Order decimals	3 of 4	15/52	7/39	16/59	17/74	55/57	605/51		
3. Round whole numbers	3 of 4	27/93	12/67	26/96	22/96	87/90	1019/86		
4. Round decimals to the nearest 1, .1, .01	3 of 4	18/62	4/22	21/78	19/83	62/64	663/56		
5. Mult/div whole #'s/dec by 10, 100, 1000	3 of 4	14/48	6/33	11/41	20/87	51/53	627/53		
6. Identify frac/dec/percents from pictures	3 of 4	7/24	4/22	13/48	20/87	44/45	417/35		
7. Convert fractions--decimals	3 of 4	14/48	10/56	25/93	23/100	72/74	695/59		
8. Convert fractions/decimals--percents	3 of 4	15/52	7/39	15/56	22/96	59/61	617/52		
9. Identify points on \$ lines/scales/grids	3 of 4	26/90	13/72	25/93	23/100	87/90	1030/87		
10. Identify ratios and fractional parts	3 of 4	13/45	5/28	20/74	21/91	59/61	634/54		
11. Identify procedure--frac/dec estimation	3 of 4	16/55	8/44	19/70	18/78	61/63	640/54		
COMPUTATIONAL SKILLS									
12. Add and subtract whole numbers	3 of 4	27/93	17/89	25/93	25/96	94/93	1111/93		
13. Multiply and divide whole numbers	3 of 4	29/100	15/79	27/100	26/100	97/96	1111/93		
14. Add and subtract decimals	3 of 4	25/86	15/79	25/93	26/100	91/90	978/82		
15. Id corr place of dec point in mult/div	3 of 4	14/48	10/53	16/59	22/85	62/61	636/53		
16. Add/subtract fractions and mixed numbers	3 of 4	9/31	2/11	9/33	16/62	36/36	338/28		
17. Multiply fractions and mixed numbers	3 of 4	10/34	1/5	7/26	14/54	32/32	228/19		
18. Determine the percent of a number	3 of 4	8/28	3/16	6/22	16/62	33/33	287/24		
19. Est prod/quot of whole #'s and decimals	3 of 4	17/59	6/32	18/67	21/81	62/61	698/58		
20. Est prod/quot of whole #'s and decimals	3 of 4	13/45	2/11	11/41	19/73	45/45	395/33		
21. Est frac parts/percents of whole #'s	3 of 4	6/21	5/26	4/15	21/81	36/36	321/27		

* State Goal is 31 of 36 Objectives Mastered.
** Remedial Standard is 78 of 144 Items Correct.

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SCHOOL BY CLASS REPORT

GRADE: 08 FORM: D TEST DATE: 09/91

SCHOOL CODE: E
DISTRICT CODE: B DISTRICT
Scores indicate Number/Percent of
students mastering each objective

NUMBER OF STUDENTS TESTED

OBJECTIVES	75931	75932	75933	75934	MASTERY CRITERIA
22. Add/sub/mult/div with a calculator	29	19	27	26	3 of 4
23. Interpret graphs, tables and charts	28/97	18/95	27/100	26/100	3 of 4
24. Solve 1-, 2-step prob-whole #s/decimals	20/69	5/26	20/74	24/92	3 of 4
25. Solve 1- and 2-step problems-fractions	16/55	6/32	17/63	20/77	3 of 4
26. Solve problems involving measurement	6/21	3/16	6/22	17/65	3 of 4
27. Solve probs with elementary probability	3/10	3/16	4/15	12/46	3 of 4
28. Estimate a reasonable answer	17/59	4/21	16/59	24/92	3 of 4
29. Solve problems with extraneous info	22/76	7/37	20/74	23/88	3 of 4
30. Identify needed information in problems	11/38	6/32	10/37	17/65	3 of 4
31. Solve process problems - organizing data	15/52	9/47	18/67	21/81	3 of 4
MEASUREMENT AND GEOMETRY	6/21	5/26	10/37	12/46	
32. Identify figures using geometric terms	11/38	3/16	8/30	14/54	3 of 4
33. Measure/determine perimeters/areas	2/7	1/5	3/11	10/38	3 of 4
34. Est length/area/volume/angle measures	12/41	9/47	17/63	19/73	3 of 4
35. Pick approx metric/cust measures & units	17/59	11/58	10/37	18/69	3 of 4
36. Conversion within measurement systems	7/24	3/16	5/19	14/54	3 of 4

AVERAGE NUMBER OF OBJECTIVES MASTERED	18.2	12.6	20.0	28.4
NUMBER/PERCENT OF STUDENTS AT OR ABOVE STATE GOAL*	2/7	0/0	2/7	8/35
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD**	7/24	11/61	2/7	0/0

* State Goal is 31 of 36 Objectives Mastered.
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DISTRICT BY SCHOOL REPORT

GRADE: 08 FORM: D TEST DATE: 09/91

DISTRICT: B DISTRICT

DISTRICT CODE:
Scores indicate Number/Percent of
students mastering each objective

MATHEMATICS

PART 1 OF 2

NUMBER OF STUDENTS TESTED

OBJECTIVES	MASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H	DISTRICT
		55	49	47	137	101	87	71	48	1218
		%/	%/	%/	%/	%/	%/	%/	%/	%/
CONCEPTUAL UNDERSTANDINGS										
1. Order fractions	3 of 4	11/22	39/80	20/45	36/28	42/43	33/38	31/46	11/24	459/39
2. Order decimals	3 of 4	20/40	39/80	26/59	57/44	55/57	42/48	36/53	19/41	605/51
3. Round whole numbers	3 of 4	40/80	47/96	42/95	114/88	87/90	75/86	55/81	34/74	1019/06
4. Round decimals to the nearest 1, .1, .01	3 of 4	24/48	44/90	23/52	68/52	62/64	44/51	42/62	17/37	663/56
5. Mult/div whole #'s/dec by 10, 100, 1000	3 of 4	24/48	31/63	22/50	72/55	51/53	36/41	37/54	24/52	627/53
6. Identify frac/dec/percents from pictures	3 of 4	21/42	43/88	18/41	25/19	44/45	31/36	19/28	6/13	417/35
7. Convert fractions--decimals	3 of 4	25/50	41/84	22/50	67/52	72/74	45/52	40/59	16/35	695/59
8. Convert fractions/decimals--percents	3 of 4	24/48	47/96	24/55	69/53	59/61	47/54	30/44	18/39	617/52
9. Identify points on # lines/scales/grids	3 of 4	44/88	48/96	33/75	112/86	87/90	75/86	64/94	42/91	1030/87
10. Identify ratios and fractional parts	3 of 4	28/56	45/92	17/39	55/42	59/61	42/48	33/49	17/37	634/54
11. Identify procedure-frac/dec estimation	3 of 4	32/64	41/84	25/57	63/48	61/63	47/54	36/53	14/30	640/54
COMPUTATIONAL SKILLS										
12. Add and subtract whole numbers	3 of 4	46/88	68/98	46/100	122/92	94/93	77/89	64/91	44/94	1111/93
13. Multiply and divide whole numbers	3 of 4	47/90	49/100	43/93	123/92	97/96	76/87	63/90	41/87	1111/93
14. Add and subtract decimals	3 of 4	49/94	46/94	38/83	108/81	91/90	69/79	49/70	35/74	978/82
15. Id corr place of dec point in mult/div	3 of 4	28/54	46/94	34/74	67/50	62/61	39/45	36/51	12/26	636/53
16. Add/subtract fractions and mixed numbers	3 of 4	18/35	32/65	15/33	25/19	36/36	23/26	16/23	3/6	338/28
17. Multiply fractions and mixed numbers	3 of 4	8/15	35/67	17/37	14/11	32/32	11/13	14/20	4/9	228/19
18. Determine the percent of a number	3 of 4	16/31	24/49	6/13	33/25	33/33	17/20	25/36	5/11	287/24
19. Est sum/diff of whole #'s and decimals	3 of 4	25/48	42/86	32/70	70/53	62/61	43/49	43/61	27/57	698/58
20. Est prod/quot of whole #'s and decimals	3 of 4	22/42	31/63	21/46	35/26	45/45	42/48	--/24	9/19	395/33
21. Est frac parts/percents of whole #'s	3 of 4	7/13	26/53	11/24	31/23	36/36	26/30	30	8/17	321/27

* State Goal is 31 of 36 Objectives Mastered.
** Remedial Standard is 78 of 144 Items Correct.

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DISTRICT BY SCHOOL REPORT

GRADE: 08 FORM: D TEST DATE: 09/91

DISTRICT: B DISTRICT

DISTRICT CODE:

Scores indicate Number/Percent of students mastering each objective

MATHEMATICS
PART 2 OF 2

NUMBER OF STUDENTS TESTED

OBJECTIVES	HASTERY CRITERIA	SCHOOL A	SCHOOL B	SCHOOL C	SCHOOL D	SCHOOL E	SCHOOL F	SCHOOL G	SCHOOL H	DISTRICT
		55	49	47	137	101	87	71	48	1218
		%/	%/	%/	%/	%/	%/	%/	%/	%/
PROBLEM SOLVING AND APPLICATIONS										
22. Add/sub/mult/div with a calculator	3 of 4	52/95	49/100	45/96	133/99	99/98	84/98	69/97	45/100	1179/98
23. Interpret graphs, tables and charts	3 of 4	39/71	42/86	31/66	80/59	69/68	48/56	44/62	22/49	773/64
24. Solve 1- and 2-step prob-whole #'s/decimals	3 of 4	38/69	43/88	23/49	77/57	59/58	43/50	45/63	23/51	703/58
25. Solve 1- and 2-step problems-fractions	3 of 4	15/27	34/69	21/45	30/22	32/32	28/33	19/27	7/16	365/30
26. Solve problems involving measurement	3 of 4	10/18	17/35	6/13	14/10	22/22	12/14	20/28	1/2	210/17
27. Solve probs with elementary probability	3 of 4	21/38	29/59	16/34	35/26	61/60	23/27	28/39	15/33	440/36
28. Estimate a reasonable answer	3 of 4	34/65	42/86	36/78	86/65	72/71	57/66	38/54	28/60	807/67
29. Solve problems with extraneous info	3 of 4	23/42	34/69	14/30	44/33	44/44	36/42	27/38	12/27	455/38
30. Identify needed information in problems	3 of 4	31/56	39/80	21/45	68/50	63/62	44/51	49/69	22/49	663/55
31. Solve process problems - organizing data	3 of 4	14/25	32/65	12/26	31/23	33/33	25/29	22/31	12/27	395/33
MEASUREMENT AND GEOMETRY										
32. Identify figures using geometric terms	3 of 4	17/31	42/86	13/28	26/19	36/36	31/36	28/39	11/24	427/35
33. Measure/determine perimeters/areas	3 of 4	3/5	21/43	1/2	9/7	16/16	6/7	12/17	3/7	167/12
34. Est length/area/volume/angle measure	3 of 4	22/40	30/61	16/34	59/44	57/56	36/42	32/45	19/42	571/47
35. Pick approp metric/cust measures & units	3 of 4	37/67	37/76	27/57	85/63	56/55	63/73	48/68	20/44	793/66
36. Conversion within measurement systems	3 of 4	11/20	22/45	7/15	21/16	29/29	14/16	26/37	6/13	278/23
AVERAGE NUMBER OF OBJECTIVES MASTERED		17.9	27.7	18.6	16.5	20.1	17.2	18.4	14.1	18.3
NUMBER/PERCENT OF STUDENTS AT OR ABOVE STATE GOAL*		3/6	19/39	2/5	3/2	12/12	7/8	10/15	0/0	88/8
NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD**		17/34	0/0	16/36	49/39	20/21	37/43	24/35	26/58	405/35

* State Goal is 31 of 36 Objectives Mastered.

** Remedial Standard is 78 of 144 Items Correct.

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PROCESS NO. 19150158-3578-06698-1

CONNECTICUT MASTERY TESTING PROGRAM

CLASS DIAGNOSTIC REPORT

LANGUAGE ARTS

PAGE 1

TEACHER: F
GROUP CODE: 50933
SCHOOL: E
DISTRICT: B DISTRICT
DISTRICT CODE:

GRADE: 08 FORM: D

TEST DATE: 09/91

NUMBER OF STUDENTS TESTED: 27

NUMBER OF STUDENTS NEEDING
FURTHER DIAGNOSIS : 5
IN WRITING : 5
IN READING : 10

OBJECTIVES

WRITING MECHANICS

1. Capitalization and Punctuation
2. Spelling
3. Agreement
4. Tone

STUDY SKILLS

5. Locating Information
6. Notetaking and Outlining
7. Literal
8. Inferential and Evaluative

READING COMPREHENSION

9. Literal
10. Inferential
11. Evaluative

MASTERY
CRITERIA
OF ITEMS
CORRECT

9 of 12

6 of 8

11 of 15

3 of 4

9 of 12

3 of 4

3 of 4

12 of 16

6 of 8

10 of 14

10 of 14

TOTAL NUMBER OF OBJECTIVES MASTERED

HOLISTIC MEASURES OF WRITING AND READING

WRITING SAMPLE

**Analytic Scores: Focus
Organization
Support/Elaboration
Conventions
(State Goal = 7 of 8; Remedial Standard = 4 of 8)

DEGREES OF READING POWER (DRP)TM

(State Goal=62 DRP Units; Remedial Standard=55 DRP Units)

OBJECTIVES	MASTERY CRITERIA # OF ITEMS CORRECT	T O H A U T J T E S F D J E M L V I E																NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE	
		CLASS																SCHOOL	DISTRICT
1. Capitalization and Punctuation	9 of 12	10	8	10	9	7	10	11	11	11	11	11	8	9	9	11	5	50/51	553/47
2. Spelling	6 of 8	7	8	7	7	7	7	8	7	8	7	8	7	7	7	8	7	72/73	840/72
3. Agreement	11 of 15	12	12	15	14	13	15	12	13	13	14	15	12	14	13	12	11	82/84	911/78
4. Tone	3 of 4	4	3	4	3	4	4	4	4	4	4	4	4	4	4	4	3	25/93	820/70
5. Locating Information	9 of 12	10	11	9	9	12	9	12	11	11	11	11	10	8	8	11	8	23/85	799/68
6. Notetaking and Outlining	3 of 4	4	4	4	3	3	4	3	3	2	2	4	4	3	3	4	3	20/74	682/60
7. Literal	3 of 4	4	2	2	2	1	1	0	3	2	3	2	3	3	4	2	0	12/44	510/44
8. Inferential and Evaluative	12 of 16	13	12	7	10	4	9	12	13	10	12	12	12	14	9	13	10	12/44	399/34
9. Literal	6 of 8	7	5	6	5	6	6	6	7	8	8	5	7	6	5	8	7	19/70	739/62
10. Inferential	10 of 14	12	9	8	8	13	10	10	11	9	7	11	10	9	6	11	7	12/44	428/36
11. Evaluative	10 of 14	10	8	8	7	11	6	11	12	9	11	14	13	4	9	8	5	9/33	369/31
TOTAL NUMBER OF OBJECTIVES MASTERED		AVERAGE NUMBER OF OBJECTIVES MASTERED																7.4	6.3
HOLISTIC MEASURES OF WRITING AND READING		#% AT/ABOVE STATE GOALS (#% BELOW REMEDIAL STANDARDS)																3/12 (5/19)	11/11 (14/14) (155/13)
WRITING SAMPLE																		10/37 (10/37)	36/37 (42/43)
DEGREES OF READING POWER (DRP) TM																		10/37 (10/37)	36/37 (42/43)

INDICATES A SCORE AT OR ABOVE THE STATE GOAL

INDICATES A SCORE BELOW THE REMEDIAL STANDARD THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS

ANALYTIC SCORES ARE GIVEN ONLY FOR THOSE STUDENTS WHO SCORED AT OR BELOW THE REMEDIAL STANDARD. V = VOID

1 = NEEDS REMEDIAL ASSISTANCE 2 = BORDERLINE PERFORMANCE 3 = SATISFACTORY PERFORMANCE

A = ABSENT
V = VOID
NS = NOT SCORABLE

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SCHOOL BY CLASS REPORT

GRADE: D8 FORM: D TEST DATE: 09/91

SCHOOL: E

DISTRICT: 8 DISTRICT

DISTRICT CODE: 8

Scores indicate Number/Percent of students mastering each objective

LANGUAGE ARTS

NUMBER OF STUDENTS TESTED		50931	50932	50933	50934	SCHOOL	DISTRICT
OBJECTIVES		MASTERY CRITERIA	%	%	%	%	%
WRITING MECHANICS							
1. Capitalization and Punctuation	9 of 12	10/36	3/16	18/67	19/79	50/51	553/47
2. Spelling	6 of 8	20/71	6/33	24/89	22/88	72/73	840/72
3. Agreement	11 of 15	23/82	12/63	26/96	21/88	82/84	911/78
4. Tone	3 of 4	16/57	11/58	25/93	24/100	76/78	820/70
STUDY SKILLS							
5. Locating Information	9 of 12	21/75	3/16	23/85	22/92	69/70	799/68
6. Notetaking and Outlining	3 of 4	13/48	5/28	20/74	20/83	58/60	682/60
LISTENING COMPREHENSION							
7. Literal	3 of 4	8/29	6/33	12/44	16/64	42/43	510/44
8. Inferential and Evaluative	12 of 16	7/25	2/11	12/44	14/56	35/36	399/34
READING COMPREHENSION							
9. Literal	6 of 8	13/46	7/37	19/70	21/84	60/61	739/62
10. Inferential	10 of 14	7/25	2/11	12/44	18/72	39/39	428/36
11. Evaluative	10 of 14	8/29	2/11	9/33	17/68	36/36	369/31

HOLISTIC MEASURES OF WRITING AND READING

WRITING SAMPLE*	HOLISTIC SCORE	%	%	%	%	%	%
NUMBER/PERCENT PRODUCING MATERIAL THAT IS:							
Well written with developed supportive detail (At or above the state goal)	7 or 8	1/4	0/0	3/12	7/27	11/11	168/14
Generally well organized with supportive detail	5 or 6	19/68	8/42	12/46	14/54	53/54	609/52
Minimally proficient	4	5/18	7/37	6/23	3/12	21/21	245/21
Below the remedial standard	2 or 3	3/11	4/21	5/19	2/8	14/14	155/13
DEGREES OF READING POWER (DRP)**							
NUMBER/PERCENT OF STUDENTS	DRP UNIT SCORE	%	%	%	%	%	%
At/above the reading goal for beginning grade 08	62+	10/36	1/5	10/37	15/63	36/37	354/30
Below the reading goal for beginning grade 08 but at or above the remedial standard	55 to 61	2/7	3/16	7/26	8/33	20/20	267/22
Below the remedial standard	Below 55	16/57	15/79	10/37	1/4	42/43	578/48
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS		5.2	2.9	7.4	8.8	6.3	6.1
AVERAGE HOLISTIC WRITING SCORE		4.9	4.4	4.9	5.6	5.0	5.1
AVERAGE DRP UNIT SCORE		54	48	57	65	56	55

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* State Goal is 7 for Writing. ** State Goal is 62 DRP Units for Reading. Remedial Standard is 4 for Writing. Remedial Standard is 55 DRP Units for Reading.

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CONNECTICUT MASTERY TESTING PROGRAM

DISTRICT BY SCHOOL REPORT

Page 1

GRADE: 08 FORM: D TEST DATE: 09/91

DISTRICT: 8 DISTRICT

DISTRICT CODE:
Scores indicate Number/Percent of
students mastering each objective

LANGUAGE ARTS

NUMBER OF STUDENTS TESTED

OBJECTIVES

MASTERY
CRITERIAWRITING MECHANICS
1. Capitalization and Punctuation
2. Spelling
3. Agreement
4. Tone
STUDY SKILLS
5. Locating Information
6. Notetaking and Outlining
LISTENING COMPREHENSION
7. Literal
8. Inferential and Evaluative
READING COMPREHENSION
9. Literal
10. Inferential
11. Evaluative9 of 12
6 of 8
11 of 15
3 of 49 of 12
3 of 4
3 of 4
12 of 166 of 8
10 of 14
10 of 1430/57
47/87
49/92
45/8547/89
49/92
44/90
32/6542/78
47/87
35/71
32/6533/65
27/53
26/51
27/5910/22
10/22
10/22
10/22

55

49

46

137

101

87

72

48

1220

553/47
840/72
911/78
820/70
799/68
682/60
510/44
399/34
739/62
428/36
369/31

HOLISTIC MEASURES OF WRITING AND READING

WRITING SAMPLE*

NUMBER/PERCENT PRODUCING MATERIAL THAT IS:

Well written with developed supportive detail
(At or above the state goal)
Generally well organized with supportive detail
Minimally proficient
Below the remedial standardDEGREES OF READING POWER (DRP)**
NUMBER/PERCENT OF STUDENTSAt/above the reading goal for beginning grade 08
Below the reading goal for beginning grade 08
but at or above the remedial standard
Below the remedial standardAVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS
AVERAGE HOLISTIC WRITING SCORE
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PROCESS NO. 19150158-3578-06699-1

Connecticut Mastery Testing Program

GRADE 8



PARENT / STUDENT DIAGNOSTIC REPORT

Your child's scores on the Connecticut Mastery Test are reported inside.

For a description of the Connecticut Mastery Testing Program, see the back cover of this folder.

For general information about your local district's testing program, please contact your superintendent of schools.

For further information on the Connecticut Mastery Testing Program, contact: Connecticut State Department of Education, Student Assessment and Testing, Box 2219, Hartford, Connecticut 06145, (203) 566-4008.

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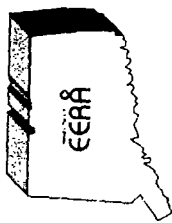
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CONNECTICUT MASTERY TESTING PROGRAM

GRADE 8 REPORT

MATHEMATICS

TEACHER: G
SCHOOL: A
DISTRICT: B DISTRICTGRADE: 08
TEST DATE: 09/91
FORM: DSTUDENT OBJECTIVES ANALYSIS
FOR

J A

OBJECTIVES TESTED

	MASTERY CRITERIA		STUDENT SCORE
	NUMBER	CORRECT	
CONCEPTUAL UNDERSTANDINGS			
1. Order fractions	3 of 4		3
2. Order decimals	3 of 4		4
3. Round whole numbers	3 of 4		4
4. Round decimals to the nearest whole number, tenth and hundredth	3 of 4		4
5. Multiply and divide whole numbers and decimals by 10, 100 and 1000	3 of 4		4
6. Identify fractions, decimals and percents from pictorial representations	3 of 4		4
7. Convert fractions to decimals and vice versa	3 of 4		4
8. Convert fractions and decimals to percents and vice versa	3 of 4		3
9. Identify points on number lines, scales and grids	3 of 4		4
10. Identify ratios and fractional parts from given data	3 of 4		3
11. Identify an appropriate procedure for making estimates with decimals and fractions	3 of 4		4
COMPUTATIONAL SKILLS			
12. Add and subtract whole numbers less than 10,000	3 of 4		4
13. Multiply and divide 2- and 3-digit whole numbers by 1- and 2-digit numbers	3 of 4		4
14. Add and subtract decimals (to hundredths) in horizontal form	3 of 4		4
15. Identify the correct placement of the decimal point in multiplication and division of decimals	3 of 4		4
16. Add and subtract fractions and mixed numbers	3 of 4		3
17. Multiply fractions and mixed numbers	3 of 4		0
18. Determine the percent of a number	3 of 4		0
19. Estimate sums and differences of whole numbers and decimals including making change	3 of 4		2
20. Estimate products and quotients of whole numbers and decimals	3 of 4		2
21. Estimate fractional parts and percents of whole numbers and money amounts	3 of 4		4
PROBLEM SOLVING AND APPLICATIONS (with calculator available)			
22. Compute sums, differences, products and quotients using a calculator	3 of 4		3
23. Interpret graphs, tables and charts	3 of 4		4
24. Solve 1- and 2-step problems involving whole numbers and decimals including averaging	3 of 4		4
25. Solve 1- and 2-step problems involving fractions	3 of 4		3
26. Solve problems involving measurement	3 of 4		3
27. Solve problems involving elementary probability	3 of 4		1
28. Estimate a reasonable answer to a given problem (without calculator available)	3 of 4		3
29. Solve problems with extraneous information	3 of 4		2
30. Identify needed information in problem situations	3 of 4		3
31. Solve process problems involving the organization of data	3 of 4		2
MEASUREMENT AND GEOMETRY (with calculator available)			
32. Identify figures using geometric terms	3 of 4		4
33. Measure and determine perimeters and areas	3 of 4		1
34. Estimate lengths, areas, volumes and angle measures	3 of 4		3
35. Select appropriate metric or customary measures and units	3 of 4		3
36. Make measurement conversions within systems	3 of 4		2

This student has mastered 28 of 36 mathematics objectives and correctly answered 108 of 144 items.

COPY 1

TOTAL NUMBER OF OBJECTIVES MASTERED (out of 36) = 28
(State Goal is 31 of 36 Objectives Mastered)
NUMBER OF ITEMS CORRECT (out of 144) = 108
(Remedial Standard is 78 of 144 items correct)

PROCESS NO. 19151638-4444-00139-1

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THE INDIANAPOLIS CORPORATION
HAROLD R. BRACE KENNEDY INC.

CONNECTICUT MASTERY TESTING PROGRAM

GRADE 8 REPORT

LANGUAGE ARTS

TEACHER: A
SCHOOL: A
DISTRICT: B DISTRICTGRADE: 08
TEST DATE: 09/91
FORM: DSTUDENT OBJECTIVES ANALYSIS
FOR

J A

OBJECTIVES TESTED

OBJECTIVES TESTED	MASTERY CRITERIA		STUDENT SCORE
	NUMBER CORRECT		
WRITING MECHANICS 1. Capitalization and Punctuation 2. Spelling 3. Agreement (verb tense, subject-object-verb, and pronoun referent) 4. Tone	9 of 12		8
	6 of 8		6
	11 of 15		14
	3 of 4		2
STUDY SKILLS 5. Locating Information (schedules, maps, indexes, glossaries, dictionaries) 6. Notetaking and Outlining	9 of 12		7
	3 of 4		2
LISTENING COMPREHENSION 7. Literal (understands the meanings of ideas clearly stated by a speaker) 8. Inferential and Evaluative (understands the meanings of ideas not clearly stated, but implied, by a speaker and is able to make critical judgments about them)	3 of 4		1
	12 of 16		9
READING COMPREHENSION 9. Literal (understands the meanings of ideas clearly stated within a passage) 10. Inferential (understands the meanings of ideas not stated, but implied, within a passage) 11. Evaluative (able to make critical judgments about statements and inferences within a passage)	6 of 8		7
	10 of 14		11
	10 of 14		9
TOTAL NUMBER OF OBJECTIVES MASTERED (out of 11) =			4

WRITING SAMPLE

Holistic Writing Score
(Remedial Standard is 4 of 8)
(Writing Goal is 7 of 8)STUDENT
SCORE

3

This student has scored below the remedial standard on the writing test and demonstrated particular weakness in the area of: Support/Elaboration. School district personnel will provide further diagnosis. If necessary, remedial help will be provided. Questions concerning these scores should be directed to this student's teacher or principal.

DEGREES OF READING POWER (DRP)TMDRP Units
(Remedial Standard is 55 DRP Units)
(Reading Goal is 62 DRP Units)STUDENT
SCORE

58

This student has scored below the reading goal for beginning eighth graders but above the remedial standard.

Degrees of Reading Power and DRP are trademarks owned by Touchstone Applied Science Associates, Inc.

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PROCESS NO. 19151638-4444-00140-1

PARENT/STUDENT DIAGNOSTIC REPORT

Dear Parent:

Inside you will find the results of the Connecticut Mastery Test administered to your child earlier this fall. The test results help to show you and the school district's professional staff how well your child is performing on those skills identified by the State of Connecticut as important for students entering eighth grade to have mastered.

These tests are designed to determine the specific skill levels of students. The test results will be used to:

- provide your school with information for use in assessing the progress of individual students over time;
- provide your school with information based on which improvements in the general instructional program can be made; and
- provide information on appropriate basic skills remedial assistance for students so indicated.

Mastery testing will occur each fall in grades four, six, and eight for all students and in high school for those students for whom retesting is required.

If you have any questions about these test results, please ask your child's teacher(s). The teacher(s) will share with you other observations and recommendations based on experience in working with your son or daughter during the last several months.

Description of the Test

Mathematics: The mathematics test assesses thirty-six (36) specific objectives in four general areas of: (1) Conceptual Understandings; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. Test items evaluate a student's ability to: order fractions and decimals; round whole numbers and decimals; make conversions among fractions, decimals and percents; compute with whole numbers, decimals and fractions; estimate with whole numbers, decimals and fractions; solve 1- and 2-step problems involving whole numbers, decimals, fractions, measurement and elementary probability (with a calculator available); estimate a reasonable answer to a problem; solve problems with extraneous information and identify needed information in problem situations; measure and/or estimate lengths, areas, volumes and angle measures; make measurement conversions; and select appropriate measurement units.

Language Arts: The language arts test covers two general areas: Reading/Listening Comprehension, and Writing/Study Skills. There are eleven (11) objectives and two holistic measures, one in reading and one in writing.

The content of Reading/Listening Comprehension consists of narrative, expository, and persuasive passages on a variety of topics measuring a student's reading and listening ability in: (1) Literal Comprehension; (2) Inferential or Interpretive Comprehension; and (3) Evaluative or Critical Comprehension. Audio tapes are used to assess a student's listening comprehension ability. Also used is the "Degrees of Reading Power" (DRP) Test which includes eleven (11) passages and seventy-seven (77) test items. It is designed to measure a student's ability to understand nonfiction English prose on a graduated scale of reading difficulty.

The content of Writing/Study Skills consists of three components. First, writing skills are directly assessed. A student is asked to write on a designated topic. The writing is judged on the student's demonstrated ability to convey information in a coherent and organized fashion. Second, the test assesses the mechanics of good writing, which are defined as: (1) Capitalization and Punctuation; (2) Spelling; (3) Agreement; and (4) Tone. Finally the test assesses Study Skills, which have been defined as Locating Information (schedules, maps, index references, and dictionary usage) and Outlining and Note-taking. This part of the test measures a student's ability to find and use information from listed sources, and to make notes from audio tapes.

Appendix H
Fall 1991 Grade Eight
State by District Report:
Mathematics

STATE BY DISTRICT REPORT

OBJECTIVES TESTED			TOTAL MATH	
CONCEPTUAL UNDERSTANDINGS	COMPUTATIONAL SKILLS	PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT AND GEOMETRY	Percent of Students Meeting State Goal
order fractions	add and subtract whole numbers	add/sub/mult/div with calculator	conversion within measurement systems	Average Number of Objectives Mastered
round whole numbers	multiply and divide whole numbers	interpret graphs, tables and charts	pick approp metric/cust measures & units	Percent of Students Needing Further Diagnosis
round decimals	add and subtract decimals	est frac parts/% of whole numbers	est length/area/volume/angle measure	Average Number of Objectives Mastered
mult/div whole numbers by 10, 100, 1000	determine the percent of a number	est prod/quot of whole numbers and dec	measure/determine perimeters/areas	Percent of Students Meeting State Goal
convert fractions to decimals, vice versa	multiply fractions and mixed numbers	est sum/diff of whole numbers and dec	identify figures using geometric terms	Percent of Students Meeting State Goal
convert fract/dec to percent, vice versa	add/sub fractions and mixed numbers	est sum/diff of whole numbers and dec	solve process problems-data organization	Percent of Students Meeting State Goal
id ratios and fractional parts from data	id corr place of dec point in mult/div	add/sub/mult/div with calculator	id needed info in problem situations	Percent of Students Meeting State Goal
id points on number lines, scales, grids	add and subtract whole numbers	est frac parts/% of whole numbers	estimate a reasonable answer	Percent of Students Meeting State Goal
id fract, dec, percents from pictures	multiply and divide whole numbers	est prod/quot of whole numbers and dec	solve problems involving measurement	Percent of Students Meeting State Goal
mult/div whole numbers by 10, 100, 1000	add and subtract decimals	est sum/diff of whole numbers and dec	solve problems involving elem probability	Percent of Students Meeting State Goal
round decimals to the nearest 1, .1, .01	determine the percent of a number	est frac parts/% of whole numbers	solve 1-, 2-step problems-fractions	Percent of Students Meeting State Goal
order fractions	add and subtract whole numbers	add/sub/mult/div with calculator	solve 1-, 2-step probs-whole #'s and dec	Percent of Students Meeting State Goal
round whole numbers	multiply and divide whole numbers	interpret graphs, tables and charts	solve 1-, 2-step problems-data organization	Percent of Students Meeting State Goal
round decimals	add and subtract decimals	est frac parts/% of whole numbers	est length/area/volume/angle measure	Percent of Students Meeting State Goal
mult/div whole numbers by 10, 100, 1000	measure/determine perimeters/areas	identify figures using geometric terms	conversion within measurement systems	Percent of Students Meeting State Goal
convert fractions to decimals, vice versa	pick approp metric/cust measures & units	measure/determine perimeters/areas	est length/area/volume/angle measure	Percent of Students Meeting State Goal
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mult/div whole numbers by 10, 100, 1000	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
round decimals to the nearest 1, .1, .01	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
order fractions	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
round whole numbers	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
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mult/div whole numbers by 10, 100, 1000	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
convert fractions to decimals, vice versa	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
convert fract/dec to percent, vice versa	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
id ratios and fractional parts from data	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
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round decimals	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
mult/div whole numbers by 10, 100, 1000	measure/determine perimeters/areas	est length/area/volume/angle measure	conversion within measurement systems	Percent of Students Meeting State Goal
convert fractions to decimals, vice versa	measure/determine perimeters/			

STATE BY DISTRICT REPORT

DISTRICT		OBJECTIVES TESTED					SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE		MEASUREMENT AND GEOMETRY				PROBLEM SOLVING AND APPLICATIONS				COMPUTATIONAL SKILLS				CONCEPTUAL UNDERSTANDINGS				TOTAL MATH												
		NUMBER TESTED	T	O	R	C			conversion within measurement systems pick app prop metric/cust measures & units est length/area/volume/angle measure measure/determine perimeters/areas identify figures using geometric terms solve process problems-data organization	id needed info in problem situations solve extraneous information problems estimate a reasonable answer solve problems involving measurement solve problems involving elem probability solve 1-, 2-step problems-fractions solve 1-, 2-step probs-whole #'s and dec	est frac parts/% of whole numbers est prod/quot of whole numbers and dec est sum/diff of whole numbers and dec determine the percent of a number multiply fractions and mixed numbers add/sub fractions and mixed numbers id corr place of dec point in mult/div add and subtract decimals multiply and divide whole numbers add and subtract whole numbers	id procedure for frac/dec estimation id ratios and fractional parts from data id points on number lines, scales, grids convert fract/dec to percent, vice versa convert fractions to decimals, vice versa id fract, dec, percents from pictures mult/div whole numbers by 10, 100, 1000 round decimals to the nearest 1, .1, .01 round whole numbers order decimals order fractions	Percent of Students Meeting State Goal Percent of Students Needing Further Diagnosis Average Number of Objectives Mastered																								
EAST HADDAM	78	5	4				100	99	97	88	74	71	63	94	72	83	100	95	97	83	51	74	91	88	88	62	64	27	79	82	62	29.8	3	56			
EAST HAMPTON	119	5	3				97	97	85	69	55	61	43	86	66	72	99	94	94	61	33	72	87	82	87	65	48	33	63	80	29	26.9	3	32			
EAST HARTFORD	352	2	6				99	97	86	72	64	54	66	86	70	69	99	89	85	66	40	64	85	69	82	60	72	53	73	82	55	27.7	6	46			
EAST HAVEN	201	2	5				94	95	79	59	35	23	43	75	38	50	98	82	75	36	31	60	76	67	68	45	40	22	64	66	35	21.9	20	19			
EAST LYME	158	4	2				99	96	91	72	64	51	63	92	68	64	99	89	89	71	49	66	77	87	85	55	64	38	77	85	61	27.8	6	45			
EASTON	80	4	1				98	100	94	89	69	66	69	94	80	68	100	93	96	83	58	86	93	86	86	69	78	49	79	94	68	30.8	0	58			
EAST WINDSOR	78	4	5				74	82	96	68	78	85	78	96	79	85	99	87	86	56	50	72	90	74	82	58	55	38	63	86	67	26.4	4	35			
ELLINGTON	141	4	3				84	70	98	84	84	75	87	84	97	86	96	98	84	79	53	52	60	91	77	65	100	94	91	68	45	77	91	84	28.2	4	43
ENFIELD	428	3	5				97	99	88	76	62	52	55	86	65	63	99	88	84	65	45	76	85	75	79	60	70	49	78	84	58	27.4	4	43			
FAIRFIELD	421	2	2				96	97	92	78	61	50	63	90	77	70	100	92	88	70	51	83	89	81	86	66	71	46	75	84	56	28.5	5	52			
FARMINGTON	193	4	2				96	98	95	90	81	78	80	95	87	86	100	95	97	89	68	84	91	92	92	75	81	75	88	93	69	32.1	0	73			
FRANKLIN	22	5	3				100	91	77	32	45	32	36	82	32	50	100	95	91	59	50	68	73	64	91	55	41	14	50	82	45	23.5	14	14			
GLASTONBURY	355	4	2				96	97	90	79	62	58	71	90	79	74	99	91	89	76	63	75	89	83	89	70	81	57	78	89	67	29.6	3	57			
GRANBY	111	4	2				98	99	87	89	72	65	66	91	78	73	99	85	87	70	62	80	86	80	81	55	80	60	76	92	67	29.4	5	62			
GREENWICH	463	2	2				97	97	91	74	69	70	68	91	72	72	100	85	87	52	42	62	78	71	74	57	71	26	69	80	44	25.1	10	30			
GRISWOLD	143	4	6				94	94	90	73	49	24	38	80	61	55	99	84	82	60	44	63	78	69	76	48	60	33	66	85	48	25.5	11	35			
GROTON	371	3	4				95	95	88	81	70	67	59	94	76	75	99	91	93	75	46	74	89	87	88	69	74	47	79	81	44	28.9	4	50			
GUILFORD	248	4	2				93	94	83	63	46	36	48	79	58	56	99	85	77	49	35	65	74	69	75	48	34	17	45	58	27	17.8	16	30			
HAMDEN	313	2	4				91	89	76	53	27	25	31	54	39	31	93	63	54	33	16	38	63	39	47	30	82	50	75	86	54	28.5	0	43			
HARTFORD	1422	1	7				96	100	68	82	50	82	68	89	75	71	100	96	89	68	46	75	100	86	86	54	82	50	75	86	54	28.5	0	43			
HARTLAND	28	6	3				96	88	64	60	12	28	52	92	68	80	100	92	96	56	40	72	84	88	96	60	56	52	84	68	36	26.3	8	36			
KENT	25	6	4				95	95	60	67	63	51	52	81	71	59	98	84	83	62	45	65	82	69	79	57	70	48	78	87	50	26.5	9	38			
KILLINGLY	221	6	6				99	100	92	60	65	52	74	94	74	70	100	94	96	81	55	87	91	87	94	66	73	53	87	87	52	29.3	1	56			
LEBANON	77	6	4				94	77	95	70	82	84	86	95	100	78	94	82	93	75	81	76	89	85	85	84	77	59	81	85	56	28.6	7	53			
LEDYARD	226	4	2				84	82	93	75	81	76	89	85	98	85	94	73	86	62	71	63	86	70	100	76	73	70	44	76	73	25	25.7	10	35		
LISBON	63	4	5				84	73	86	62	71	63	86	70	100	76	73	78	95	87	90	67	88	76	99	74	84	76	60	78	85	47	28.2	5	51		
LITCHFIELD	87	6	3				94	99	86	79	67	61	74	87	61	63	99	94	92	83	61	85	88	88	85	69	77	68	84	80	57	29.9	4	60			
MADISON	226	5	2				96	96	89	80	74	67	73	88	78	77	99	94	92	83	61	85	88	88	85	69	77	68	84	80	57	29.9	4	60			

MATHEMATICS
GRADE 8

TEST DATE: 09/91

BEST COPY AVAILABLE

MATHEMATICS
GRADE 8

TEST DATE: 09/91

OBJECTIVES TESTED			TOTAL MATH									
CONCEPTUAL UNDERSTANDINGS		COMPUTATIONAL SKILLS	PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT AND GEOMETRY								
order fractions order decimals round whole numbers round decimals to the nearest 1, .1, .01 multiply whole numbers by 10, 100, 1000 id fract, dec, percents from pictures convert fractions to decimals, vice versa convert fract/dec to percent, vice versa id points on number lines, scales, grids id ratios and fractional parts from data id procedure for fract/dec estimation add and subtract whole numbers multiply and divide whole numbers add and subtract decimals id corr place of dec point in mult/div add/sub fractions and mixed numbers determine the percent of a number est sum/diff of whole numbers and dec est prod/quot of whole numbers and dec est frac parts % of whole numbers add/sub/mult/div with calculator interpret graphs, tables and charts solve 1-, 2-step probs-whole #'s and dec solve 1-, 2-step problems-fractions solve problems involving measurement solve problems involving elem probability estimate a reasonable answer solve extraneous information problems id needed info in problem situations solve process problems-data organization identify figures using geometric terms measure/determine perimeters/areas est length/area/volume/angle measure pick approp metric/cust measure & units conversion within measurement systems				conversion within measurement systems pick approp metric/cust measure & units est length/area/volume/angle measure measure/determine perimeters/areas identify figures using geometric terms								
Percent of Students Meeting State Goal		Average Number of Objectives Mastered										
Percent of Students Needing Further Diagnosis												
MATH												
MATHEMATICS GRADE 8												
TEST DATE: 09/91												
DISTRICT	NUMBER TESTED	T E O R C G	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE									
MANCHESTER	499	3 4	82 75 91 66 75 70 80 79 96 80 78	95 95 82 64 56 54 48 84 59 61	99 87 87 63 35 70 80 76 76 56	67 40 71 76 45	26.0	11	38			
MANSFIELD	113	6 4	88 88 98 75 85 84 88 91 99 90 91	96 96 88 68 72 71 81 91 81 81	100 95 92 77 62 93 88 87 94 66	86 82 86 88 66	30.6	3	63			
MERIDEN	565	3 6	61 66 90 70 62 54 66 65 91 67 71	94 92 81 62 45 30 41 76 56 45	98 79 77 46 31 52 75 59 64 43	52 27 57 75 37	22.6	21	24			
MIDDLETOWN	284	3 6	62 76 89 65 66 54 71 68 94 75 71	95 95 87 57 42 34 39 85 49 47	97 78 78 49 37 64 77 63 76 48	50 28 67 77 33	23.5	17	27			
MILFORD	401	3 4	74 69 95 72 75 63 77 76 97 81 77	95 97 88 75 61 57 54 83 65 57	98 89 86 59 45 68 84 74 80 50	68 32 71 82 57	26.3	7	38			
MONROE	221	4 2	75 73 96 81 74 66 79 78 99 73 80	97 99 85 91 63 62 57 89 68 67	100 90 92 68 43 69 87 83 81 66	73 38 76 78 48	27.4	5	42			
MONTVILLE	185	4 5	77 78 91 76 77 56 76 72 94 79 79	97 99 85 91 63 62 57 89 68 67	98 85 85 60 33 61 78 66 76 56	58 32 70 74 40	25.2	15	36			
NAUGATUCK	289	2 6	79 77 94 74 76 64 78 73 97 75 74	96 96 86 74 58 51 53 80 59 58	99 83 78 60 38 65 77 67 70 49	55 42 64 79 44	25.5	8	33			
NEW BRITAIN	467	3 6	50 51 90 59 51 41 50 54 89 64 54	92 89 72 49 30 20 25 65 37 32	95 71 64 32 21 43 70 44 58 36	33 16 52 64 29	19.1	33	12			
NEW CANAAN	177	2 1	86 76 95 84 85 78 88 85 98 82 88	95 95 90 75 67 64 72 91 73 73	99 93 95 74 53 82 89 85 82 70	73 57 82 86 46	28.9	4	53			
NEW FAIRFIELD	193	4 2	85 81 95 80 83 79 88 88 99 86 89	97 97 88 76 60 47 65 91 70 74	99 92 92 79 53 85 82 92 89 71	58 48 75 82 53	27.4	5	42			
NEW HAVEN	1076	1 7	50 55 81 50 52 43 60 57 87 59 56	92 88 82 52 34 24 24 67 32 31	96 67 60 34 17 41 65 41 54 29	35 16 49 58 29	18.8	34	10			
NEWINGTON	273	2 3	85 85 95 77 78 70 82 82 100 86 86	99 98 86 69 68 61 57 88 69 65	99 90 91 69 43 75 86 78 82 65	68 36 78 76 57	27.8	7	46			
NEW LONDON	176	3 6	57 70 93 58 51 42 70 56 92 64 60	93 96 85 62 39 30 42 69 43 35	99 74 75 43 24 40 74 51 59 39	32 27 56 61 34	20.9	19	13			
NEW MILFORD	303	5 4	79 69 92 78 78 66 86 75 98 83 82	97 97 91 80 59 60 58 89 72 65	100 90 92 66 47 70 87 77 82 62	58 48 75 82 53	27.4	5	42			
NEWTON	266	5 2	89 89 95 77 81 76 86 87 98 86 85	91 91 69 55 35 19 47 77 68 58	99 85 88 45 47 70 80 72 79 50	79 48 79 83 47	29.0	3	49			
NORTH BRANFORD	137	4 3	74 74 99 69 77 60 80 74 95 77 85	91 91 69 55 35 19 47 77 68 58	99 85 88 45 47 70 80 72 79 50	79 48 79 83 47	29.0	3	49			
NORTH CANAAN	42	6 4	70 64 90 67 74 62 60 81 98 74 76	95 90 79 50 48 17 57 67 55 55	99 85 88 45 47 70 80 72 79 50	79 48 79 83 47	29.0	3	49			
NORTH HAVEN	213	2 3	82 73 92 76 78 75 81 79 97 82 78	95 96 91 77 67 66 66 89 68 67	99 88 85 71 40 72 80 79 80 56	37 42 71 78 46	24.5	7	19			
NORTH STONINGTON	75	5 3	91 84 96 81 85 77 89 83 100 84 91	97 96 97 87 57 56 71 93 80 76	100 88 93 69 59 67 85 83 85 64	63 29 80 87 63	28.9	1	44			
NORWALK	591	3 6	63 59 89 61 60 58 70 61 91 71 70	95 94 83 58 42 32 35 74 51 45	98 75 73 48 33 55 73 57 62 39	57 37 67 77 49	22.4	23	24			
NORWICH	394	3 6	67 74 94 63 72 64 72 75 96 77 77	96 95 90 68 53 45 51 82 60 54	99 84 87 58 39 60 82 70 73 51	61 24 63 74 44	25.3	11	33			
OLD SAYBROOK	85	5 4	94 80 95 85 73 69 82 96 81 91	96 99 86 73 65 48 74 93 76 76	99 88 93 77 49 58 86 79 89 58	71 56 75 85 58	28.4	4	52			
PLAINFIELD	120	5 3	88 91 92 89 85 74 92 84 98 87 90	96 97 94 79 58 47 67 93 70 72	99 88 93 77 49 58 86 79 89 58	82 53 73 89 55	28.7	2	49			
PLAINVILLE	195	6 6	84 82 95 82 77 81 77 97 84 85	94 95 93 78 63 56 65 87 73 71	99 87 88 69 43 76 86 78 80 59	70 45 77 83 48	27.8	6	44			
PLYMOUTH	166	4 5	70 80 92 83 71 66 83 83 97 76 75	99 96 92 84 69 60 57 86 67 66	99 92 90 70 46 70 81 72 76 55	56 46 75 86 45	27.1	8	41			
POMFRET	141	2 5	67 81 96 71 76 70 79 79 96 78 80	91 93 82 67 58 52 60 76 61 57	99 82 85 61 47 65 82 71 74 48	56 35 65 84 55	25.6	10	38			
	48	6 4	90 90 96 92 90 73 88 90 92 88 90	100 96 94 73 83 56 58 88 75 63	98 88 85 79 40 65 94 75 79 65	69 42 67 77 48	28.3	2	46			

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STATE BY DISTRICT REPORT

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STATE BY DISTRICT REPORT

OBJECTIVES TESTED				TOTAL MATH	
CONCEPTUAL UNDERSTANDINGS		COMPUTATIONAL SKILLS	PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT AND GEOMETRY	
order fractions		add and subtract whole numbers	add/sub/mult/div with calculator	identify figures using geometric terms	conversion within measurement systems
round whole numbers		multiply and divide whole numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
round decimals to the nearest 1, .1, .01		id procedure for frac/dec estimation	id corr place of dec point in mult/div	solve 1-, 2-step probs-whole #'s and dec	est length/area/volume/angle measure
mult/div whole numbers by 10, 100, 1000		add and subtract whole numbers	multiply fractions and mixed numbers	solve extraneous information problems	measure/determine perimeters/areas
convert fractions to decimals, vice versa		multiply fractions and mixed numbers	determine the percent of a number	estimate a reasonable answer	conversion within measurement systems
convert fract/dec to percent, vice versa		est sum/diff of whole numbers and dec	est prod/quot of whole numbers and dec	id needed info in problem situations	pick approp metric/cust measures & units
id points on number lines, scales, grids		est frac parts/% of whole numbers	add/sub/mult/div with calculator	solve process problems-data organization	est length/area/volume/angle measure
id ratios and fractional parts from data		est prod/quot of whole numbers and dec	add/sub/mult/div with calculator	id needed info in problem situations	pick approp metric/cust measures & units
id procedure for frac/dec estimation		add and subtract whole numbers	add and subtract decimals	solve 1-, 2-step probs-whole #'s and dec	measure/determine perimeters/areas
add and subtract whole numbers		multiply and divide whole numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
add and subtract decimals		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
id corr place of dec point in mult/div		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	est length/area/volume/angle measure
determine the percent of a number		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	measure/determine perimeters/areas
est sum/diff of whole numbers and dec		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
est frac parts/% of whole numbers		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
add/sub/mult/div with calculator		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	est length/area/volume/angle measure
interpret graphs, tables and charts		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	measure/determine perimeters/areas
solve 1-, 2-step probs-whole #'s and dec		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
solve 1-, 2-step problems-fractions		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
solve problems involving measurement		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	est length/area/volume/angle measure
solve problems involving elem probability		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	measure/determine perimeters/areas
estimate a reasonable answer		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
solve extraneous information problems		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
id needed info in problem situations		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	est length/area/volume/angle measure
solve process problems-data organization		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	measure/determine perimeters/areas
identify figures using geometric terms		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
measure/determine perimeters/areas		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	pick approp metric/cust measures & units
est length/area/volume/angle measure		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	est length/area/volume/angle measure
pick approp metric/cust measures & units		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	measure/determine perimeters/areas
conversion within measurement systems		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	conversion within measurement systems
Percent of Students Meeting State Goal		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	Percent of Students Meeting State Goal
Percent of Students Needing Further Diagnosis		multiply fractions and mixed numbers	add and subtract decimals	solve 1-, 2-step problems-fractions	Percent of Students Needing Further Diagnosis

DISTRICT	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE			
	NUMBER TESTED	T	E	R
UNION	10	6	5	80
VERNON	293	3	4	83
VOLUNTOWN	28	6	5	79
WALLINGFORD	394	3	5	77
WATERBURY	604	1	6	52
WATERFORD	170	4	4	81
WATERTOWN	217	2	5	84
WESTBROOK	48	6	4	94
WEST HARTFORD	534	2	2	85
WEST HAVEN	451	2	6	72
WESTON	100	5	1	89
WESTPORT	236	3	1	92
WETHERSFIELD	224	2	3	80
WILLINGTON	65	5	4	95
MILTON	225	4	1	92
MINCHESTER	108	6	5	67
MINDHAM	193	6	6	73
MINDSOR	338	2	4	74
MINDSOR LOCKS	114	4	5	69
MOLCOTT	169	2	5	82
WOODSTOCK	85	6	3	76
REGIONAL SCH 4	143	6	4	75
REGIONAL SCH 5	304	4	2	93
REGIONAL SCH 6	57	6	4	88
REGIONAL SCH 7	127	6	3	89
REGIONAL SCH 8	211	5	2	87
REGIONAL SCH 10	177	5	3	81
REGIONAL SCH 11	57	6	4	91

MATHEMATICS
GRADE 8

TEST DATE: 09/91

MATHEMATICS
GRADE 8

TEST DATE: 09/91

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STATE BY DISTRICT REPORT

DISTRICT		NUMBER TESTED	T E C	OBJECTIVES TESTED										TOTAL MATH	
				CONCEPTUAL UNDERSTANDINGS	COMPUTATIONAL SKILLS	PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT AND GEOMETRY								
<p>MATHEMATICS GRADE 8</p> <p>TEST DATE: 09/91</p>															
				SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE											
TOC 1 TOTAL	5053	47 53 82 54 54 39 58 55 86 60 54	92 91 80 54 31 25 29 62 36 32	96 67 60 34 19 41 67 43 54 34	37 17 48 61 28	18.9	34	12							
TOC 2 TOTAL	6520	80 79 95 79 80 72 82 81 97 82 82	96 97 90 74 62 52 60 87 68 66	99 89 87 66 46 73 84 78 80 59	65 45 74 81 52	27.4	7	45							
TOC 3 TOTAL	7164	72 72 93 71 71 63 75 73 95 76 76	95 95 86 70 53 45 48 82 60 55	98 84 83 57 40 63 80 69 74 51	60 35 68 78 47	25.2	13	34							
TOC 4 TOTAL	6294	83 82 95 79 81 75 85 84 98 84 85	96 97 89 77 64 56 63 89 73 70	99 91 91 71 52 75 87 82 84 63	71 51 77 84 56	28.4	6	49							
TOC 5 TOTAL	3422	83 80 95 81 80 74 85 84 98 85 85	96 97 91 75 62 55 63 90 70 70	99 91 91 71 48 73 86 82 85 63	65 48 75 81 54	28.1	4	46							
TOC 6 TOTAL	2519	80 75 93 75 71 80 80 97 80 83	95 95 86 69 57 48 58 85 68 64	99 88 87 63 47 69 83 78 82 60	67 48 77 85 51	27.0	8	42							
ERG 1 TOTAL	1765	91 86 96 85 88 84 91 91 99 90 90	97 97 93 82 78 73 76 95 79 79	99 94 95 83 63 85 90 90 89 72	77 68 82 88 66	30.8	2	66							
ERG 2 TOTAL	5711	87 82 96 82 83 77 86 86 98 86 86	96 97 90 76 66 57 66 90 75 72	99 91 92 74 54 77 87 84 85 64	72 53 79 84 58	28.9	5	53							
ERG 3 TOTAL	3459	82 79 94 80 77 72 83 80 98 83 85	96 96 88 73 58 50 58 88 69 66	99 90 90 66 45 71 84 79 82 61	65 44 75 81 51	27.4	6	43							
ERG 4 TOTAL	4736	79 76 94 75 77 69 81 80 97 80 81	95 96 88 73 60 53 56 87 66 64	99 89 88 64 44 71 84 77 81 58	68 44 73 81 52	27.0	8	42							
ERG 5 TOTAL	4164	77 76 95 77 77 67 79 78 96 80 80	97 97 87 74 56 46 53 85 65 62	99 88 86 62 43 68 83 76 80 56	62 38 73 81 49	26.5	8	38							
ERG 6 TOTAL	7421	66 68 91 68 68 58 71 69 93 73 72	95 94 85 66 49 39 45 78 54 51	98 81 78 52 35 58 78 64 69 48	54 33 63 74 42	23.9	17	29							
ERG 7 TOTAL	3716	44 52 81 52 51 37 58 54 86 58 52	92 90 80 53 29 23 26 59 35 30	96 65 57 32 17 38 65 39 52 31	35 15 47 51 26	18.3	37	10							
STATE TOTAL	30972	74 73 92 73 73 65 77 76 95 78 77	95 95 87 70 55 47 53 82 62 59	98 85 83 60 42 66 81 72 76 54	61 40 69 78 48	25.8	12	38							

APPENDIX I
Fall 1991 Grade Eight
State by District Report:
Language Arts

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 8									
TEST DATE: 09/91									
OBJECTIVES TESTED		TOTAL LANGUAGE ARTS		DEGREES OF READING POWER (DRP)		WRITING SAMPLE			
WRITING MECHANICS		READING COMPREHENSION		STUDY SKILLS		LISTENING COMPREHENSION			
capitalization and punctuation		literal		notetaking and outlining		literal			
agreement		inferential and evaluative		locating information		inferential			
tone		literal				evaluative			
</									

STATE BY DISTRICT REPORT

OBJECTIVES TESTED										TOTAL LANGUAGE ARTS		DEGREES OF READING POWER (DRP)		WRITING SAMPLE																			
WRITING MECHANICS		STUDY SKILLS		LISTENING COMPREHENSION		READING COMPREHENSION				Average Number of Objectives Mastered	62+ (% Meeting State Goal) 55-61 Below 55 (% Needing Further Diagnosis)	Average Holistic Score	% of Students Meeting State Goal	% of Students Needing Further Diagnosis																			
capitalization and punctuation	spelling (homonyms/abbreviations)	agreement	tone	locating information	notetaking and outlining	literal	inferential and evaluative	literal	inferential						evaluative																		
TEST DATE: 09/91										6/8		10/14																					
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																																	
DISTRICT	NUMBER TESTED	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																															
		T	E	O	R	C	9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/16	6/8	10/14	10/14																
EAST HADDAM	80	5	4				86	86	99	91	89	97	80	87	93	83	81	9.8	5	10	85	69	0	15	29	29	15	11	0	4.8	15	11	
EAST HAMPTON	119	5	3				82	76	94	89	90	88	65	81	87	70	66	8.8	11	18	71	65	3	10	27	24	17	14	5	5.0	13	19	
EAST HARTFORD	393	2	6				66	66	96	90	88	85	58	60	85	65	62	8.4	7	22	71	66	0	2	11	28	34	17	7	5.7	3	24	
EAST HAVEN	197	2	5				63	82	90	81	78	66	49	53	76	51	56	7.5	26	22	52	60	0	7	18	31	27	15	2	5.3	7	17	
EAST LYME	158	4	2				72	80	97	87	89	83	69	78	87	78	68	8.9	10	15	75	66	1	4	13	17	22	30	13	6.0	5	43	
EASTON	80	4	1				83	86	98	99	98	89	61	85	94	90	89	9.7	1	19	80	69	0	1	0	3	20	49	27	7.0	1	76	
EAST WINDSOR	78	4	5				72	73	97	94	92	73	56	74	91	72	72	8.7	5	21	74	66	0	8	14	26	19	24	9	5.7	8	33	
ELLINGTON	140	4	3				83	78	95	95	95	85	68	73	90	73	73	9.1	6	16	77	67	1	1	9	24	30	21	14	6.0	2	35	
ENFIELD	429	3	5				70	79	96	96	96	82	69	75	86	74	70	8.9	8	18	74	66	1	2	9	21	32	27	8	6.0	2	35	
FAIRFIELD	421	2	2				80	79	94	91	89	87	77	79	86	75	73	9.1	16	13	72	65	2	5	19	25	29	12	9	5.5	6	21	
FARMINGTON	193	4	2				86	85	98	96	96	92	79	85	96	87	83	9.8	2	6	92	74	0	0	2	15	28	24	32	6.7	0	56	
FRANKLIN	22	5	3				64	77	91	86	91	55	45	77	77	55	59	7.8	14	32	55	63	0	5	14	19	19	24	19	6.0	5	43	
GLASTONBURY	355	4	2				83	82	96	94	94	87	76	84	92	82	80	9.5	6	11	83	68	0	2	11	19	27	24	16	6.1	2	41	
GRANBY	111	4	2				69	73	97	94	94	85	74	77	93	81	82	9.2	6	12	82	68	2	1	7	16	21	30	23	6.4	3	53	
GREENWICH	467	2	2				68	78	94	90	90	84	71	78	88	77	75	9.0	12	13	75	66	2	1	3	13	26	27	29	6.6	2	56	
GRISWOLD	143	4	6				71	68	95	92	87	80	62	67	80	63	63	8.3	21	17	62	62	3	5	17	20	26	22	8	5.6	8	29	
GROTON	371	3	4				74	71	93	89	86	79	61	67	83	64	63	8.3	21	16	63	62	2	2	11	19	27	23	15	6.0	4	38	
GUILFORD	249	4	2				84	82	95	94	92	89	60	84	92	79	83	9.5	8	10	82	69	2	2	3	13	22	26	20	15	5.9	4	35
HAMDEN	314	2	4				71	83	94	88	87	79	35	26	88	69	62	8.4	24	19	57	61	2	3	13	22	26	20	15	5.9	4	35	
HARTFORD	1429	1	7				40	66	71	63	58	51	59	57	54	31	28	5.3	55	21	24	53	6	8	19	21	26	13	6	5.1	15	18	
HARTLAND	28	6	3				82	86	100	93	93	89	89	86	89	86	82	9.8	11	4	86	67	4	7	29	21	14	11	14	5.3	11	25	
KENT	27	6	4				78	67	100	100	96	93	67	78	93	70	74	9.1	7	7	85	71	4	4	4	33	52	4	0	5.4	7	4	
KILLINGLY	222	6	6				73	69	93	86	81	79	60	77	82	62	65	8.3	23	15	62	61	1	5	13	19	31	23	8	5.7	6	31	
LEBANON	78	6	4				90	86	96	92	91	87	66	82	94	78	77	9.4	3	15	82	69	0	3	12	16	40	16	14	6.0	3	30	
LEDYARD	226	4	2				75	80	94	89	88	89	70	82	88	78	76	9.1	11	12	78	67	3	3	15	19	26	18	18	5.9	6	35	
LISBON	63	4	5				79	87	98	89	83	81	70	78	94	76	71	9.1	10	22	68	65	2	8	19	16	35	16	5	5.4	10	21	
LITCHFIELD	89	6	3				70	63	91	87	93	86	80	75	83	74	76	8.8	12	18	70	67	5	2	8	19	19	33	13	6.0	7	46	
MADISON	226	5	2				78	82	95	93	92	91	78	77	92	75	81	9.3	8	16	75	67	2	6	13	18	26	21	15	5.8	8	35	

STATE BY DISTRICT REPORT

DISTRICT	OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE								Average Holistic Score	% of Students Meeting State Goal	% of Students Needing Further Diagnosis							
	WRITING MECHANICS		STUDY SKILLS	LISTENING COMPREHENSION	READING COMPREHENSION				Average Number of Objectives Mastered	Average DRP Score			62+ (% Meeting State Goal)	55-61	Below 55 (% Needing Further Diagnosis)	2	3	4	5	6				7	8					
	capitalization and punctuation	spelling (homonyms/abbreviations)			agreement	tone	locating information	notetaking and outlining																		literal	inferential and evaluative	literal	inferential	evaluative
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)										SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																				
NUMBER TESTED	T	E	O	R	C	G	9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/16	6/8	10/14	10/14													
MANCHESTER	499	3	4	76	79	92	86	85	77	64	70	83	68	66	8.5	18	19	63	63	1	5	16	25	31	13	9	5.5	6	22	
MANSFIELD	113	6	4	93	79	99	96	95	87	76	85	95	85	83	9.7	6	4	90	72	0	3	9	21	23	27	13	5	2	58	
MERIDEN	565	3	6	61	70	86	81	77	68	55	58	73	52	51	7.3	24	18	58	61	3	2	6	19	26	28	14	6	5.4	12	
MIDDLETOWN	284	3	6	70	73	92	86	83	75	57	62	78	58	55	7.9	25	23	52	60	2	2	6	25	22	25	14	7	5.3	21	
MILFORD	401	3	4	79	79	95	92	89	84	66	69	86	69	67	8.7	18	16	66	64	1	6	25	22	25	14	7	5.3	8	21	
MONTROE	221	4	2	86	84	96	93	90	84	70	71	90	73	67	9.0	17	19	64	64	2	8	31	28	19	9	3	4.9	10	12	
MONTVILLE	186	4	5	67	73	92	88	84	82	62	59	82	66	62	8.2	19	20	61	63	1	6	13	27	33	8	11	5.5	8	19	
NAUGATUCK	291	2	6	67	64	93	89	89	80	51	56	77	54	49	7.7	26	22	52	60	4	3	15	20	31	15	11	5.6	8	26	
NEW BRITAIN	467	3	6	46	63	82	69	66	60	45	37	57	39	33	6.0	50	19	31	53	8	15	27	21	22	6	1	4.5	24	7	
NEW CANAAN	177	2	1	72	75	95	90	90	87	73	85	88	79	84	9.2	6	11	84	69	1	1	11	20	29	24	15	6.1	2	38	
NEW FAIRFIELD	194	4	2	70	86	97	97	92	84	65	74	95	83	85	9.4	4	10	86	71	0	1	5	19	29	24	21	6.3	1	45	
NEW HAVEN	1082	1	7	43	68	76	76	69	55	36	32	55	36	33	5.9	53	19	28	53	9	10	21	22	22	11	5	4.9	19	16	
NEWINGTON	272	2	3	84	92	96	94	92	87	66	78	90	78	77	9.3	10	14	76	67	1	6	19	28	29	17	1	5.3	7	18	
NEW LONDON	176	3	6	61	75	86	75	80	65	40	37	67	42	39	6.7	43	26	31	56	4	11	14	22	30	10	7	5.2	16	17	
NEW MILFORD	302	5	4	80	80	97	91	89	86	68	71	89	74	68	8.9	11	17	72	65	1	2	6	13	34	23	22	6.3	3	44	
NEWTON	266	5	2	77	75	94	92	92	88	76	86	88	79	78	9.3	8	12	80	68	1	3	9	20	30	20	16	6.0	5	36	
NORTH BRANFORD	137	4	3	73	77	94	92	91	82	72	77	84	64	68	8.7	12	14	74	65	1	1	9	21	34	17	18	6.1	1	34	
NORTH CANAAN	41	6	4	85	88	95	90	93	85	41	59	95	78	73	8.8	10	17	73	66	0	0	2	27	24	27	20	6.3	0	46	
NORTH HAVEN	213	2	3	76	76	97	92	90	87	61	66	90	77	73	8.8	11	13	76	66	1	3	18	22	27	21	8	5.6	4	29	
NORTH STONINGTON	75	5	3	81	73	99	96	93	93	72	82	97	84	85	9.6	1	12	87	71	3	5	9	20	37	16	9	5.7	8	25	
NORWALK	591	3	6	62	69	87	77	73	66	49	50	73	51	47	7.1	35	23	42	57	6	7	18	23	28	12	7	5.2	13	19	
NORWICH	394	3	6	71	76	93	91	90	78	63	65	84	66	64	8.4	17	14	69	64	2	3	9	26	31	19	11	5.8	4	29	
OLD SAYBROOK	85	5	4	72	78	96	91	86	91	74	76	93	72	73	9.0	15	19	66	65	1	1	11	22	28	27	9	5.9	2	36	
OXFORD	120	5	3	78	85	99	94	92	86	61	80	93	74	81	9.2	5	11	84	68	3	13	29	23	19	10	3	4.9	16	13	
PLAINFIELD	195	6	6	81	79	93	94	91	82	69	70	89	71	71	8.9	13	16	71	65	2	6	13	27	36	11	6	5.5	7	17	
PLAINVILLE	167	4	5	80	82	89	93	86	81	62	59	86	68	68	8.5	13	25	63	63	1	3	11	20	31	22	11	5.9	4	33	
PLYMOUTH	142	2	5	68	79	91	85	79	78	63	69	84	63	61	8.2	21	15	64	62	1	7	13	27	33	12	7	5.4	9	19	
POMFRET	48	6	4	81	75	100	100	92	94	73	94	94	94	77	9.7	6	17	77	69	0	6	8	21	33	19	13	5.9	6	31	

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STATE BY DISTRICT REPORT

OBJECTIVES TESTED										TOTAL LANGUAGE ARTS		DEGREES OF READING POWER (DRP)		WRITING SAMPLE	
WRITING MECHANICS		STUDY SKILLS		LISTENING COMPREHENSION		READING COMPREHENSION									
capitalization and punctuation		locating information		literal		inferential and evaluative		literal		inferential		evaluative			
agreement		notetaking and outlining													
spelling (homonyms/abbreviations)															
tone															

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 8	OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE																			
	WRITING MECHANICS		STUDY SKILLS	LISTENING COMPREHENSION	READING COMPREHENSION																											
	capitalization and punctuation		locating information	notetaking and outlining	literal	inferential and evaluative		literal	inferential				evaluative																			
	spelling (homonyms/abbreviations)																															
	tone	agreement																														
TEST DATE: 09/91												Average Number of Objectives Mastered		Below 55 (% Needing Further Diagnosis)		55-61		62+ (% Meeting State Goal)		Average DRP Score		Average Holistic Score		% of Students Meeting State Goal		% of Students Needing Further Diagnosis						
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)																																
DISTRICT	NUMBER TESTED	T	E	O	R	C	G	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																								
UNION	10	6	5					80	90	100	100	100	80	100	100	90	100	10.3	0	10	90	72	0	10	20	10	20	30	6.1	10	50	
VERNON	292	3	4					81	77	88	88	82	66	73	85	73	68	8.8	9	19	72	66	0	4	15	24	32	17	8	5.6	4	24
VOLUNTOIR	28	6	5					71	75	79	79	68	71	75	89	68	68	8.4	21	18	61	63	4	4	11	21	18	43	0	5.8	7	43
WALLINGFORD	393	3	5					77	83	94	87	84	72	73	87	73	70	8.9	34	17	71	65	4	12	20	26	23	8	7	5.0	16	15
WATERBURY	914	1	6					54	62	84	79	73	43	39	64	43	43	6.5	34	22	44	58	3	6	16	24	28	16	7	5.4	9	23
WATERFORD	170	4	4					83	72	95	92	86	58	74	87	68	69	8.7	12	24	65	65	1	3	16	21	37	12	10	5.7	4	22
WATERTOWN	217	2	5					87	84	95	93	92	67	82	91	78	71	9.3	6	11	84	68	1	1	12	23	27	23	13	5.9	2	35
WESTBROOK	49	6	4					94	77	100	96	87	66	74	92	78	76	9.4	8	13	79	66	2	4	18	10	24	24	16	5.9	6	41
WEST HARTFORD	535	2	2					73	80	95	93	90	72	78	90	78	77	9.2	10	11	79	68	0	1	4	10	26	31	27	6.6	1	58
WEST HAVEN	448	2	6					75	78	92	86	80	54	62	79	58	59	8.3	20	20	60	62	4	12	32	22	21	8	2	4.8	15	10
WESTON	100	5	1					84	89	98	95	94	80	78	95	84	89	9.8	5	6	89	71	0	2	6	19	30	26	17	6.2	2	43
WESTPORT	236	3	1					78	80	98	94	91	79	78	96	89	88	9.6	6	10	84	69	0	0	5	21	31	24	18	6.3	0	42
WETHERSFIELD	224	2	3					79	83	96	93	88	70	75	85	72	75	9.0	10	14	75	66	4	2	29	14	33	8	9	5.3	6	17
WILLINGTON	65	5	4					77	68	94	95	85	82	83	94	82	80	9.2	8	12	80	68	0	2	5	16	30	27	22	6.4	2	48
WILTON	225	4	1					76	83	99	94	90	78	82	92	84	84	9.6	5	9	86	71	0	2	9	16	29	27	17	6.2	2	44
WINCHESTER	108	6	5					73	72	95	94	91	55	66	80	56	65	8.2	19	18	63	63	1	6	24	22	33	7	6	5.3	7	13
WINDHAM	189	6	6					52	63	88	85	67	54	62	78	58	59	7.4	30	19	51	60	3	10	17	17	25	15	12	5.4	14	28
WINDSOR	334	2	4					62	75	91	88	80	65	64	91	77	73	8.6	13	19	68	65	1	5	16	25	25	18	10	5.6	6	28
WINDSOR LOCKS	114	4	5					77	80	92	89	82	63	75	88	65	68	8.6	17	15	68	65	2	9	20	33	23	7	6	5.1	11	13
WOLCOTT	169	2	5					92	72	95	93	89	63	67	87	70	67	8.8	12	14	74	67	2	4	21	22	24	20	7	5.5	6	27
WOODSTOCK	85	6	3					72	76	93	94	91	78	85	87	74	82	9.2	10	13	78	67	2	3	8	17	28	21	20	6.1	6	41
REGIONAL SCH 4	143	6	4					81	67	94	94	87	69	77	88	76	69	8.9	4	12	85	69	0	1	8	24	28	21	18	6.1	1	39
REGIONAL SCH 5	304	4	2					81	84	98	96	95	76	82	94	91	84	9.7	7	14	79	68	2	12	16	25	23	19	4	5.3	14	23
REGIONAL SCH 6	57	6	4					79	86	95	96	91	74	82	98	84	79	9.5	8	13	79	68	1	3	12	25	33	19	7	5.7	4	26
REGIONAL SCH 7	127	6	3					76	81	94	95	96	77	84	90	77	84	9.4	10	12	78	67	1	6	13	26	32	17	6	5.5	7	22
REGIONAL SCH 8	210	5	2					69	81	95	94	91	77	85	89	79	78	9.3	10	12	85	67	1	6	13	26	32	17	6	5.5	7	22
REGIONAL SCH 10	176	5	3					79	74	98	98	98	73	87	98	86	81	9.6	1	14	85	71	1	2	9	24	36	21	7	5.8	3	28
REGIONAL SCH 11	57	6	4					61	70	93	91	88	88	72	89	69	76	8.7	16	14	70	64	0	5	14	23	33	14	11	5.7	5	25

LANGUAGE ARTS GRADE 8																													
TEST DATE: 09/91																													
DISTRICT	MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)		OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP) Average DRP Score 62+ (% Meeting State Goal) 55-61 Below 55 (% Needing Further Diagnosis)	WRITING SAMPLE 8 7 6 5 4 3 2 Average Holistic Score % of Students Meeting State Goal % of Students Needing Further Diagnosis														
	NUMBER TESTED	T E R C G	WRITING MECHANICS		STUDY SKILLS		LISTENING COMPREHENSION		READING COMPREHENSION		WRITING SAMPLE																		
			capitalization and punctuation	spelling (homonyms/abbreviations)	agreement	tone	locating information	notetaking and outlining	literal	inferential and evaluative		literal				inferential	evaluative												
REGIONAL SCH 12	74	6	2	80	74	96	92	96	89	69	73	89	62	64	15	19	66	64	8	1	3	8	14	36	24	14	6.1	4	38
REGIONAL SCH 13	122	5	3	79	77	95	88	84	82	68	76	85	78	75	11	17	73	66	7	2	3	18	17	31	16	14	5.7	5	30
REGIONAL SCH 14	96	4	2	90	82	100	93	94	89	84	82	86	80	84	7	9	83	69	0	0	0	1	9	31	28	30	6.8	0	58
REGIONAL SCH 15	231	4	3	77	84	97	94	93	84	80	77	91	79	76	8	12	80	68	0	2	2	9	18	32	28	11	6.1	2	39
REGIONAL SCH 16	133	4	5	67	81	96	85	83	78	64	68	86	68	73	18	15	67	63	2	12	22	23	25	11	5	5.1	14	17	
REGIONAL SCH 17	137	6	3	87	78	93	93	92	85	67	85	90	75	78	7	10	82	68	0	2	7	19	36	22	14	6.1	2	36	
REGIONAL SCH 18	85	6	2	76	79	96	94	89	84	67	81	92	76	79	11	18	72	66	2	5	11	11	20	24	28	6.2	7	52	

STATE BY DISTRICT REPORT

LANGUAGE ARTS GRADE 8		OBJECTIVES TESTED					TOTAL LANGUAGE ARTS		DEGREES OF READING POWER (DRP)		WRITING SAMPLE	
		WRITING MECHANICS	STUDY SKILLS	LISTENING COMPREHENSION	READING COMPREHENSION	Average Number of Objectives Mastered	Average DRP Score 62+ (% Meeting State Goal) 55-61 Below 55 (% Needing Further Diagnosis)	Average Holistic Score	% of Students Meeting State Goal	% of Students Needing Further Diagnosis	8 7 6 5 4 3 2	
		capitalization and punctuation spelling (homonyms/abbreviations) agreement tone	locating information notetaking and outlining literal	literal inferential and evaluative	literal inferential evaluative							
MASTERY CRITERIA (NUMBER CORRECT/NUMBER POSSIBLE)		9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/16	6/8	10/14	10/14
DISTRICT	NUMBER TESTED	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE										
TOC 1 TOTAL	5379	47	68	77	72	67	59	41	34	60	38	35
TOC 2 TOTAL	6564	75	78	94	90	88	83	65	70	86	71	68
TOC 3 TOTAL	7158	70	75	91	86	84	77	62	64	81	64	62
TOC 4 TOTAL	6299	79	80	96	92	91	86	70	77	90	77	76
TOC 5 TOTAL	3421	78	79	96	93	91	87	71	78	90	76	75
TOC 6 TOTAL	2517	76	75	94	92	89	83	68	76	87	71	72
ERG 1 TOTAL	1765	81	84	98	94	94	91	76	83	93	84	85
ERG 2 TOTAL	5723	78	81	95	92	91	87	73	80	90	78	76
ERG 3 TOTAL	3459	78	79	96	92	91	85	71	78	90	76	75
ERG 4 TOTAL	4736	76	77	94	90	88	83	66	71	87	72	69
ERG 5 TOTAL	4160	76	79	94	91	88	82	65	70	86	69	67
ERG 6 TOTAL	7764	64	71	89	83	80	73	55	56	76	56	55
ERG 7 TOTAL	3731	43	69	75	69	65	55	38	31	57	34	31
STATE TOTAL	31338	70	76	91	87	85	79	62	65	82	66	64

TEST DATE: 09/91

APPENDIX J
Type of Community Classifications

Type of Community

- TOC 1 = LARGE CITY - a town with a population of more than 100,000.
- TOC 2 = FRINGE CITY - a town contiguous with a large city, and with a population over 10,000.
- TOC 3 = MEDIUM CITY - a town with a population between 25,000 and 100,000 and not a Fringe City.
- TOC 4 = SMALL TOWN (Suburban) - a town within an SMSA* with a population of less than 25,000, not a Fringe City.
- TOC 5 = SMALL TOWN (Emerging Suburban) - a town with a population of less than 25,000 included in what was a proposed 1980 SMSA but not included in a 1970 SMSA.
- TOC 6 = SMALL TOWN (Rural) - a town not included in an SMSA, with a population of less than 25,000.

*Standard Metropolitan Statistical Area

APPENDIX K
Education Reference Group Descriptions

Education Reference Group Descriptions

The education reference groups were formed from an analysis of districts' median family income, a percentage of high school graduates, a percentage of those in managerial/professional occupations, a percentage of single-parent families, a percentage of those below poverty and a percentage of non-English home language from the 1980 census. The groups have not been named, but have been labeled I through VII. Note, however, that the groups run from extremely affluent suburban communities (I) to our three largest cities of Hartford, Bridgeport and New Haven (VII). Some differ widely with respect to all of the family background variables; others differ slightly with respect to one or two. In addition to the six variables used to classify districts, the group descriptions below also include superintendents' comments that were provided in a Department survey in 1988.

Group I. These 13 districts were wealthy, professional suburbs. The median family income in 1979 averaged \$40,425. Residents were extremely well educated. Nearly 90% had at least a high school diploma, 42% had a bachelor's degree and 49% had a managerial or professional job. There were relatively few children with educational disadvantages here. Only 7% of the families were single-parent, about 8% spoke a language other than English at home and almost no one (2%) lived in poverty. Superintendents within these towns used the adjectives "suburban," "affluent," "growing" and "bedroom community" to describe them.

Group II. Residents in the 29 districts of Group II were affluent, well-educated professionals, but to a lesser extent than residents of Group I. The median family income averaged \$28,113, more than 83% of the residents had high school diplomas, 29% had a college degree and 36% had a managerial or professional job. Like Group I, this group had a low percentage of people who spoke another language at home (8%), almost no one in poverty (2%) and relatively few single-parent families (9%). Like the superintendents in Group I, superintendents from these towns described their communities as "affluent," "bedroom communities," "growing" and "suburban."

Group III. These 34 districts were mostly rural bedroom communities. Like Groups I and II, these towns did not have many disadvantaged children. There were only 7% who spoke a language other than English at home, only 7% who were from single-parent families and only 3% who were poor. Adults were slightly less affluent (median family income of \$24,431), less likely to have a high school diploma (77%) and less likely to have a managerial or professional job (28%) than people in Group II. Like the previous two groups, these towns were described by superintendents as "suburban," "growing" and "bedroom communities." Several superintendents used "rural" and "middle class" (as well as "affluent") to describe their communities.

Group IV. This group of 37 districts was probably the most diverse set of towns, containing a number of coastal and resort communities, as well as rural and suburban areas. Group IV was similar to Group III in median family income (\$22,609), percentage of high school graduates (77%), percentage of managers/professionals (29%) and percentage of non-English home language (7%), but had a significantly higher percentage of single-parent families (12% versus 7%) and a slightly higher percentage of families below poverty (5% versus 3%). Superintendents' descriptions reflect this group's diversity. They describe their towns as "bedroom," "growing," "rural," "suburban," "middle income" and "affluent."

Group V. These 30 districts made up the first group of working class/blue collar communities. This group had a significantly lower percentage of high school graduates (68%) and percentage of managers/professionals (19%) than Group IV. Other characteristics were similar to Group IV: the average income was \$21,920, there were 11% single-parent families, 5% below poverty and 9% of the population spoke a language other than English at home.

Group VI. This group of 23 districts included the state's medium-sized cities, the larger cities of Stamford and Waterbury, several former mill towns and some densely populated blue collar suburbs. Group VI had similar socioeconomic characteristics as Group V, but significantly greater proportions of single-parent families and families in which English was not the primary home language. The median family income of \$20,325 was below the state average. An average of 16% of the residents spoke another language at home, and 17% of the families were headed by single parents. Only 63% of the residents had high school diplomas, and 6% lived below poverty level.

Group VII. Hartford, Bridgeport and New Haven were vastly different from other communities in Connecticut. An average of 28% of the families spoke a language other than English, 46% were headed by single parents, 20% lived in poverty and the median family income was \$15,240.

APPENDIX L
Student Participation Rates

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
ANSONIA	180	168	6.7	98.2	97.0	95.2	97.6
ASHFORD	34	33	2.9	100.0	100.0	100.0	100.0
AVON	168	168	.0	100.0	100.0	100.0	100.0
BERLIN	168	162	3.6	99.4	100.0	98.8	99.4
BETHEL	212	206	2.8	100.0	99.5	100.0	100.0
BLOOMFIELD	179	171	4.5	100.0	100.0	98.2	100.0
BOLTON	49	49	.0	100.0	95.9	91.8	95.9
BOZRAH	15	15	.0	100.0	100.0	100.0	100.0
BRANFORD	227	222	2.2	100.0	100.0	100.0	100.0
BRIDGEPORT	1,338	1,227	8.3	99.3	98.5	95.9	97.7
BRISTOL	520	473	9.0	100.0	99.8	99.6	99.8
BROOKFIELD	186	185	.5	98.9	98.9	99.5	99.5
BROOKLYN	81	78	3.7	100.0	98.7	98.7	98.7
CANAAN	7	7	.0	100.0	100.0	100.0	100.0
CANTERBURY	73	72	1.4	100.0	98.6	98.6	98.6
CANTON	88	87	1.1	100.0	100.0	100.0	100.0
CHESHIRE	308	301	2.3	99.7	99.7	98.7	99.3
CLINTON	159	147	7.5	100.0	100.0	100.0	100.0
COLCHESTER	140	137	2.1	100.0	100.0	100.0	100.0
COLUMBIA	60	58	3.3	98.3	100.0	100.0	100.0
CORNWALL	13	13	.0	100.0	100.0	100.0	100.0
COVENTRY	118	114	3.4	100.0	100.0	100.0	100.0
CROMWELL	123	122	.8	100.0	100.0	99.1	100.0
DANBURY	599	543	9.3	98.2	100.0	99.2	100.0
DARLEM	193	192	.5	100.0	100.0	94.3	96.1
DERBY	110	105	4.5	100.0	100.0	94.3	100.0
EASTFORD	14	13	7.1	100.0	100.0	92.3	92.3
EAST GRANBY	51	51	.0	100.0	100.0	100.0	100.0
EAST HADDAM	82	80	2.4	97.5	100.0	98.8	98.8
EAST HAMPTON	120	119	.8	100.0	100.0	100.0	100.0
EAST HARTFORD	446	393	11.9	89.6	100.0	88.0	88.3
EAST HAVEN	221	203	8.1	99.0	97.0	94.6	96.6
EAST LYNE	158	158	.0	100.0	100.0	98.7	99.4
EASTON	81	80	1.2	100.0	100.0	98.8	98.8
EAST WINDSOR	96	96	16.7	97.5	97.5	97.5	97.5
ELLINGTON	151	142	6.0	99.3	97.9	95.8	98.6
ENFIELD	436	429	1.6	99.8	99.3	100.0	100.0
FAIRFIELD	440	421	4.3	100.0	100.0	99.8	99.8
FARMINGTON	206	196	4.9	98.5	98.5	98.5	98.5
FRANKLIN	22	22	.0	100.0	100.0	95.5	100.0
GLASTONBURY	356	355	.3	100.0	100.0	99.4	100.0
GRANBY	112	111	.9	99.1	100.0	100.0	100.0
GREENWICH	496	467	5.8	100.0	100.0	98.5	99.8
GRISWOLD	148	143	3.4	99.5	100.0	100.0	100.0
GROTON	387	373	3.6	99.5	99.5	99.5	99.5
GUILFORD	257	249	3.1	99.6	100.0	99.6	99.6
HAMDEN	326	315	3.4	99.4	99.7	99.4	98.7
HARTFORD	1,665	1,455	12.6	97.7	97.9	93.7	95.9
HARTLAND	28	28	.0	100.0	100.0	100.0	100.0
KENT	34	29	14.7	86.2	93.1	93.1	93.1
KILLINGLY	228	222	2.6	99.5	100.0	100.0	99.5
LEBANON	87	78	10.3	98.7	100.0	98.7	100.0
LEDYARD	229	226	1.3	100.0	100.0	100.0	100.0
LISBON	64	63	1.6	100.0	100.0	100.0	100.0

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
LITCHFIELD	91	89	2.2	97.8	100.0	93.3	100.0
MADISON	227	227	.0	99.6	99.6	99.6	99.6
MANCHESTER	505	499	1.2	100.0	100.0	99.2	99.6
MANSFIELD	115	113	1.7	100.0	100.0	100.0	98.2
MERIDEN	605	567	6.3	99.6	99.5	99.1	99.6
MIDDLETOWN	292	284	2.7	100.0	99.6	99.3	99.6
MILFORD	415	401	3.4	100.0	100.0	99.8	100.0
MONROE	225	221	1.8	100.0	100.0	100.0	100.0
MONTVILLE	187	186	.5	99.5	100.0	100.0	100.0
NAUGATUCK	312	292	6.4	99.0	99.7	99.0	98.3
NEW BRITAIN	530	484	8.7	96.5	95.5	91.1	93.4
NEW CANAAN	178	177	.6	100.0	100.0	100.0	100.0
NEW FAIRFIELD	197	194	1.5	99.5	99.0	99.0	99.0
NEW HAVEN	1,205	1,093	9.3	98.4	98.0	94.7	95.2
NEWINGTON	279	273	2.2	100.0	99.6	99.3	99.3
NEW LONDON	203	178	12.3	98.9	98.3	97.8	98.9
NEW MILFORD	314	304	3.2	99.7	99.3	98.4	98.7
NEWTOWN	269	266	1.1	100.0	100.0	100.0	100.0
NORTH BRANFORD	137	137	.0	100.0	100.0	100.0	100.0
NORTH CANAAN	44	42	4.5	100.0	97.6	97.6	97.6
NORTH HAVEN	219	213	2.7	100.0	100.0	100.0	100.0
NORTH STONINGTON	76	75	1.3	100.0	98.7	100.0	100.0
NORWALK	631	598	5.2	98.8	98.8	94.5	94.8
OLD SAYBROOK	425	399	6.1	98.7	98.7	98.2	98.0
OXFORD	86	85	1.2	100.0	100.0	100.0	100.0
PLAINFIELD	127	120	5.5	100.0	100.0	100.0	99.2
PLAINVILLE	200	195	2.5	100.0	100.0	100.0	100.0
PLYMOUTH	172	167	2.9	99.4	100.0	99.4	100.0
POMFRET	152	142	6.6	99.3	100.0	95.1	100.0
PORTLAND	49	48	2.0	100.0	100.0	100.0	100.0
PRESTON	74	72	2.7	100.0	100.0	100.0	100.0
PUTNAM	61	57	6.6	100.0	100.0	100.0	100.0
REDDING	105	100	4.8	100.0	98.0	98.0	98.0
RIDGEFIELD	92	91	1.1	98.9	98.9	98.9	98.9
ROCKY HILL	227	225	.9	100.0	100.0	99.6	99.1
SALEM	150	143	4.7	99.3	99.3	99.3	99.3
SALISBURY	44	43	2.3	100.0	100.0	100.0	100.0
SEYMOUR	26	26	.0	100.0	100.0	100.0	100.0
SHARON	150	148	1.3	98.6	98.6	98.6	98.6
SHELTON	21	19	9.5	100.0	100.0	94.7	100.0
SHERMAN	348	334	4.0	99.7	98.8	98.5	98.8
SIMSBURY	26	25	3.8	100.0	100.0	100.0	100.0
SOMERS	275	272	1.1	100.0	100.0	99.6	100.0
SOUTHINGTON	99	96	3.0	100.0	100.0	100.0	100.0
SOUTH WINDSOR	467	453	3.0	99.6	99.6	99.6	99.6
SPRAGUE	279	274	1.8	97.4	99.3	99.3	97.4
STAFFORD	31	30	3.2	96.7	100.0	100.0	100.0
STAMFORD	134	118	11.9	98.3	94.1	91.5	94.1
STERLING	813	742	8.7	98.8	98.9	96.2	97.8
STONINGTON	34	33	2.9	97.0	100.0	97.0	100.0
STRAITFORD	161	155	3.7	99.4	98.7	97.4	98.7
SUFFIELD	459	451	1.7	99.8	99.8	99.9	99.6
THOMASTON	134	132	1.5	100.0	100.0	100.0	100.0
	79	79	.0	100.0	100.0	100.0	100.0

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
THOMPSON	118	114	3.4	99.1	98.2	98.2	98.2
TOLLAND	138	138	.0	100.0	100.0	100.0	100.0
TORRINGTON	303	274	9.6	100.0	98.2	98.2	98.2
TRUMBULL	366	365	.3	99.7	99.7	99.7	99.7
UNION	10	10	.0	100.0	100.0	100.0	100.0
VERNON	314	294	6.4	99.7	99.0	98.6	98.6
VOLUNTOWN	28	28	.0	100.0	100.0	100.0	100.0
WALLINGFORD	415	395	4.8	99.7	99.5	99.2	99.2
WATERBURY	1,003	922	8.1	98.8	98.9	98.6	98.2
WATERFORD	173	170	1.7	100.0	100.0	100.0	100.0
WATERTOWN	244	218	10.7	99.5	99.5	99.1	99.1
WESTBROOK	51	49	3.9	98.0	100.0	100.0	98.0
WEST HARTFORD	554	536	3.2	99.6	99.4	99.6	99.8
WEST HAVEN	484	451	6.8	100.0	98.9	97.6	97.6
WESTON	102	101	1.0	99.0	99.0	99.0	99.0
WESTPORT	248	236	4.8	100.0	100.0	100.0	99.6
WETHERSFIELD	236	225	4.7	99.6	99.6	99.6	99.6
WILLINGTON	66	65	1.5	100.0	100.0	98.5	100.0
WILTON	225	225	.0	100.0	100.0	98.7	99.6
WINCHESTER	118	108	8.5	100.0	100.0	100.0	100.0
WINDHAM	220	194	11.8	99.5	97.4	95.4	96.9
WINDSOR	351	341	2.8	99.1	97.9	97.1	97.9
WINDSOR LOCKS	123	115	6.5	99.1	99.1	99.1	99.1
WOLCOTT	169	169	.0	100.0	100.0	100.0	99.4
WOODSTOCK	87	87	.0	97.7	97.7	94.3	97.7
REGIONAL SCH 4	145	143	1.4	100.0	100.0	100.0	100.0
REGIONAL SCH 5	308	304	1.3	100.0	99.7	99.7	100.0
REGIONAL SCH 6	57	57	.0	100.0	100.0	100.0	100.0
REGIONAL SCH 7	141	127	9.9	100.0	100.0	100.0	100.0
REGIONAL SCH 8	211	211	.0	100.0	99.5	99.5	99.5
REGIONAL SCH 10	192	177	7.8	100.0	99.4	99.4	99.4
REGIONAL SCH 11	61	57	6.6	100.0	100.0	100.0	100.0
REGIONAL SCH 12	74	74	.0	100.0	100.0	100.0	100.0
REGIONAL SCH 13	122	122	.0	97.5	100.0	98.4	98.4
REGIONAL SCH 14	97	96	1.0	100.0	100.0	100.0	100.0
REGIONAL SCH 15	232	231	.4	100.0	100.0	100.0	100.0
REGIONAL SCH 16	133	133	.0	99.2	99.2	99.2	100.0
REGIONAL SCH 17	145	137	5.5	100.0	100.0	100.0	100.0
REGIONAL SCH 18	85	85	.0	100.0	100.0	100.0	100.0

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PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1991-1992

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
TOC 1 TOTAL	6,024	5,439	9.7	98.5	98.4	95.6	96.8
TOC 2 TOTAL	6,891	6,590	4.4	98.9	99.5	98.1	98.5
TOC 3 TOTAL	7,643	7,214	5.6	99.3	99.0	97.9	98.3
TOC 4 TOTAL	6,447	6,312	2.1	99.7	99.7	99.4	99.7
TOC 5 TOTAL	3,539	3,439	2.8	99.5	99.4	98.8	99.2
TOC 6 TOTAL	2,650	2,533	4.4	99.4	99.4	98.7	99.1
ERG 1 TOTAL	1,789	1,767	1.2	99.9	99.9	99.5	99.6
ERG 2 TOTAL	5,854	5,734	2.0	99.6	99.7	99.4	99.6
ERG 3 TOTAL	3,585	3,471	3.2	99.7	99.6	99.0	99.5
ERG 4 TOTAL	4,918	4,754	3.3	99.6	99.6	99.2	99.3
ERG 5 TOTAL	4,365	4,185	4.1	99.5	99.3	98.7	99.2
ERG 6 TOTAL	8,475	7,841	7.5	98.6	98.8	96.7	97.3
ERG 7 TOTAL	4,208	3,775	10.3	98.4	98.1	94.7	96.3
STATE TOTAL	33,194	31,527	5.0	99.2	99.2	98.0	98.5

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Department of Education**

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